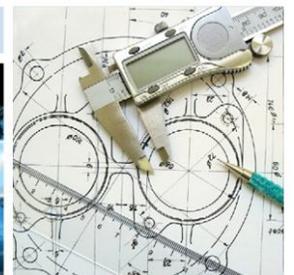
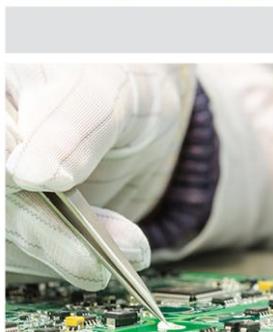


United States Patent and Trademark Office



Patent Public Advisory Committee Annual Report  
**2014**



3 November 2014

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November 3, 2014

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The White House  
Washington, D.C. 10500-0001

Dear Mr. President:

It is my pleasure and privilege to present you with the 2014 Annual Report of the Patent Public Advisory Committee (PPAC) of the United States Patent and Trademark Office (USPTO). Fiscal Year 2014 was another year of great change and progress at the USPTO, including the appointment in January 2014 of Michelle Lee as Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office. We congratulate you on your decision to nominate Ms. Lee to be Director of the USPTO as her continued leadership will provide stability and ensure continued progress through the remainder of your term.

For the USPTO, FY 2014 was a year of recovery from the budget cuts resulting from FY 2013 sequestration that forced delays to major initiatives. Access to fees in FY 2014, largely because of the Leahy-Smith America Invents Act (AIA), allowed the Agency to make excellent progress in a number of areas, including Information Technology (IT) infrastructure initiatives, hiring of patent examiners and judges, and ongoing efforts to reduce patent pendency and the application backlog.

Throughout the year, fees collected tracked above the appropriated level, with the Agency (Office) netting an excess of \$129 million that became the first deposit into the Patent and Trademark Fee Reserve Fund (PTFRF) that was established by the AIA to ensure all fees paid by USPTO customers can be used by the Agency to cover operations and expenses. The Agency plans to submit a reprogramming notification for these funds that will allow it to access them. It is critical that the Agency be able to access all fees paid to it.

The PPAC supported FY 2013 fee increases to fund an operating reserve that would sustain USPTO funding and allow the Agency to make critical and long-overdue improvements to its IT infrastructure and hire the requisite number of examiners to meet pendency goals. The stable funding environment is now supporting the Agency as it prepares to institute a major new initiative called Building a World Class Patent Quality System. The new initiative has three supporting pillars: first, to provide the best work products and services at every stage of the patent process; second, to improve the customer experience with an emphasis on excellent customer service; and third, to engage the public in partnership to educate and seek input. The Agency will use a number of roadshows in early 2015 to educate stakeholders and the public about the initiative and gain support for it.

The linkage between IP and the U.S. economy is clear. For American innovation to continue to thrive, we must have a strong patent system that encourages innovation, attracts investors, grows our economy and creates good jobs. The ability to patent, and thereby protect an invention, is the necessary incentive for inventors and innovative companies to assume the financial risk and investment to bring new products and services to market. And, as you are well aware, a strong, technologically supported Agency is vital to its ability to provide timely high quality examinations of patent applications that result in strong patents being issued that support our economy and stimulate innovation around the world.

Thank you for taking the time to review this report. We welcome any questions you or your staff have about it.

Respectfully,

A handwritten signature in black ink, appearing to read "Louis J. Foreman", with a long horizontal flourish extending to the right.

Louis J. Foreman  
Chairman  
Patent Public Advisory Committee  
United States Patent and Trademark Office

Enclosure: Patent Public Advisory Committee Fiscal Year 2014 Annual Report

cc: The Honorable Patrick J. Leahy, Chairman, Senate Judiciary Committee  
The Honorable Robert W. Goodlatte, Chairman, House Judiciary Committee  
The Honorable Charles E. Grassley, Ranking Minority Member,  
Senate Judiciary Committee  
The Honorable John Conyers, Jr., Ranking Minority Member, House Judiciary Committee

The Honorable Howard Coble, Chairman, Subcommittee on Courts, Intellectual Property,  
and the Internet

The Honorable Jerrold Nadler, Ranking Member, Subcommittee on Courts, Intellectual  
Property, and the Internet

The Honorable Penny Pritzker, Secretary of Commerce

Michelle K. Lee, Deputy Under Secretary of Commerce for Intellectual Property and  
Deputy Director of the United States Patent and Trademark Office

Margaret Focarino, Commissioner for Patents

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## EXECUTIVE SUMMARY

### I. INTRODUCTION

The Patent Public Advisory Committee (PPAC or Committee) thanks the United States Patent and Trademark Office (USPTO or Office), and in particular, Deputy Under Secretary Michelle Lee, for the assistance and positive atmosphere enabling our committee to interact effectively and efficiently with the employees of the USPTO. Throughout the year, all personnel of the USPTO provided unfettered access to the information requested by the PPAC in the role as advisors. They regularly provided detailed information allowing us to better understand the complex issues facing the USPTO and permitted constructive discussions of options, constraints, and upcoming initiatives for our consideration and comment.

The PPAC thanks all of the employees of the USPTO for their assistance over this year and for the efforts made by all to improve the system and provide a world class patent office. The leadership at the USPTO has consistently demonstrated a commitment to excellence throughout all of our interactions and we commend their efforts to continually provide better service, quality, information, and interactions with the public. This positive atmosphere translated to more productive interactions with the PPAC and the public in numerous venues. The USPTO continued to demonstrate transparency by holding public meetings and issuing requests for comment on various proposed changes, actions which can only provide better results. We are grateful to the management of the USPTO and the examiners' union, POPA, for the assistance we have received in fulfilling our roles as members of the PPAC. We look forward to our continuing interactions with the USPTO.

FY 2014 was a year of recovery from the budget cuts stemming from sequestration in FY 2013, resulting in delays to projects and improvements. The USPTO has made excellent progress during FY 2014, accomplishing improvements in a number of areas, largely due to increased access to fees compared to FY 2013. Sequestration in FY 2013 had necessitated significant cuts in the IT initiatives and hiring, but during FY 2014, these projects were begun again to continue the critical IT initiatives and pendency reduction efforts targeted by the USPTO.

Throughout FY 2014, fee collections tracked above the appropriated level. At the end of the fiscal year, the Office collected \$129 million of patent fees above the appropriated level, which is the first deposit into the Patent and Trademark Fee Reserve Fund (PTFRF) established by the Leahy-Smith America Invents Act (AIA) in 2013 to ensure that *all* fees paid by customers of the USPTO were available to the Office to cover operations and related expenses of the Office only. The USPTO is planning to submit a reprogramming notification for these funds, which will be the USPTO's first opportunity to access funds deposited in the PTFRF. Of paramount importance to the PPAC is the access to all fees paid to the USPTO, including those fees

deposited in the PTFRF. We supported fee increases in FY 2013 to fund an operating reserve to support sustainable funding and to allow the USPTO to make critical, long-overdue improvements to the IT infrastructure and to hire examiners to provide the necessary manpower to meet the pendency targets. It is crucial that all of that increased fee revenue remain with the USPTO and be made available for use in achieving these critical improvements. The linkage between intellectual property (IP) and the U.S. economy is clear, and a strong, technologically-supported USPTO is vital to maintaining the ability of the USPTO to provide timely, quality examination resulting in patents of value in the world marketplace.

## **II. PPAC PROCESSES**

The PPAC holds quarterly meetings at the USPTO to address patent-related matters. These meetings are announced in advance, are open to the public, are Web cast, and have telephone call-in numbers so interested persons can provide real-time feedback and ideas. We encourage members of the public to submit comments and questions via telephone, e-mail, or via the PPAC Web site. The Committee also participates in hearings, roundtables, and other publically announced events to obtain input regarding matters of significance to the USPTO and the innovation communities.

The Committee has several standing subcommittees to address topical areas that are focused upon issues that require action over time. The subcommittees consist of up to four members. Subcommittees meet informally from time to time, either in person or via teleconferences. The topical areas discussed in detail below represent matters of ongoing interest to the USPTO and the Committee. Topical area subcommittees interact with USPTO personnel to obtain information, engage in in-depth discussions, and provide suggestions to assist the Office.

Members of the subcommittees have greatly appreciated the high level of cooperation and trust afforded by Office personnel. For this trust, the Committee sincerely thanks Deputy Director Michelle Lee, Commissioner Focarino, and other Office personnel for helping to create a very positive, effective working relationship for the benefit of the entire user community.

Brief descriptions of the PPAC's activities and how those have furthered the Strategic Plan are below. More detailed descriptions are provided in the individual sections.

### **A. FINANCE**

The USPTO continues its efforts toward establishing a sustainable funding model that provides the Office with a reliable and sustainable source of funding. The Office is 100% user fee funded and thus must operate like a business, providing services and charging fees projected to cover the cost of the services. Projecting fees is a constant challenge, as it requires the Office to predict

user behavior often years in advance. The Office must take into account changes in global economic conditions, possible legislative and judicial changes, and potential Presidential Directives. Each of these, in addition to many other factors, has elastic effects on demand for the services of the Office and thus the funds available to the Office.

The USPTO requested access to \$3,071 million of user fees (\$2,808 million of which are patent fees) in its FY 2014 President's Budget. Congress appropriated the Office \$47 million less than the initial request, \$3,024 million. Throughout FY 2014, fee collections tracked above the appropriated level. At the end of the fiscal year, the Office collected \$129 million of patent fees above the appropriated level.

For FY 2015, the USPTO's appropriation bill is congressionally marked at \$3,458 million. The Office estimated FY 2015 fee collections in the FY 2015 President's Budget of \$3,442 million. Priorities for the upcoming fiscal year are stated to be a continuation of FY 2014 with additional focus on information technology updates.

The USPTO is committed to being responsive to the chilling effect on innovation of high user fees. In FY 2014, the USPTO finalized a policy prescribing the process for biennial reviews of the agency fee structure and will engage in a biennial fee review at the start of FY 2015. The PPAC commends the Office for undertaking these reviews to re-evaluate whether fees are commensurate with the Office's projected needs.

**Recommendations:** While we commend the changes that the AIA imparted, we cannot ignore the continuing financial uncertainty that the Office is subjected to annually.

The PPAC is very concerned regarding the PTFRF that was established by the AIA for deposit of fees collected by the Office above the appropriated level. The first deposit into the PTFRF was made this fall. This will be the first test of whether the USPTO will indeed have access to all user fees regardless of whether the fees are in excess of the Office's congressionally-approved appropriations and will be the first test of whether the language of the AIA fulfills its stated purpose.

Due to continued uncertainty, the PPAC again urges 1) the Administration to prevent the application of any future sequestrations of, or revenue diversions from, the Office and 2) Congress to consider removing the Office from the appropriations process.

The PPAC will continue to monitor and consult with the USPTO as the appropriation and biennial fee review processes continue. We are confident that the USPTO will continue its outreach to all stakeholders, including the PPAC, to ascertain the appropriate fee schedule going forward.

## B. INFORMATION TECHNOLOGY

In FY 2014, the Office of the Chief Information Officer (OCIO) accelerated the pace of information technology (IT) development after sustaining drastic cuts during the prior year's sequestration. The Office significantly increased the IT budget this year in order to allow for the resumption of key initiatives such as Patents End-to-End and to continue to upgrade its aging IT infrastructure. The OCIO resumed hiring, engaged new contractors, restarted tabled projects, and increased IT spending by 71% (an increase of about \$262 million) from FY 2013 to FY 2014. The jump in spending this year was largely due to the restoration of funding for projects that had been brought to a dead stop in April 2013 during sequestration. This resulted in progress on work that had been deferred or delayed during the previous year's budget cuts. However, because of the latency in hiring and resuming projects that was noted in our previous report, the Office is still recovering from 2013 and the IT infrastructure is still at risk.

Further increases in IT spending are planned for FY 2015 in order to continue with projects that were put on hold during FY 2013, hire qualified staff to support new technologies as they are phased in, and maintain mission-critical systems as the transition is gradually made to a new infrastructure. The OCIO expects IT spending to taper and in fact plans lower spending in FY 2017 and beyond, as the new systems take over and the Office no longer has to bear the costs of supporting both the legacy systems and new technologies. The OCIO currently projects a spending increase of 18% in the IT budget for FY 2015 over FY 2014 with a return to FY 2014 spending levels within three years.

As the PPAC has reported in previous years, the Office has undertaken a set of modernization initiatives to drive these objectives, with a portfolio known as "Patents End-to-End" (PE2E) as its mainstay. PE2E, as its name indicates, is a set of IT systems aimed at streamlining the processing of patent documents and actions from their inception to their downstream archiving. In addition to offering opportunities for enhancements to patent quality (for example, through better search capabilities, collaboration among examiners and offices, and consistency in office actions), the PE2E portfolio comprises part of the Office's need to upgrade an aging IT infrastructure, a challenge faced by all large-scale organizations.

In FY 2014, the OCIO revived dozens of projects that had been de-funded or had funding reduced during the budget cuts of FY 2013. This entailed selecting and engaging new contractors to perform highly skilled technical work, as well as hiring over 100 new IT employees. Because of the timing of bringing on and training new people and deploying them to projects, some of the projects that had been delayed could not be resumed until late in the year. However, as of the time of this report, the OCIO is on track in terms of recovering ground lost during the previous year. Nearly every delayed project has been at least restarted. Additionally, the IT staff has met the ongoing requirements of the AIA and international systems such as

Cooperative Patent Classification and Global Dossier. The OCIO has also done a commendable job of stabilizing legacy systems that could not be upgraded.

The PPAC notes that, while considerable progress has been made, the Office is still using an IT infrastructure for mission-critical operations that is out of date. The main transaction-handling system for the Office, the Patent Application Location and Monitoring system, and the search tools used by examiners, for example, are both built on proprietary technological designs from the 1980s. These examples illustrate that, while the IT funding situation has improved and work is progressing with deliberate speed, the PPAC points to the ever urgent need for aggressive development in IT at the same time as it is pleased with the improvements in funding and commends the OCIO for progress during FY 2014. This means that in the coming years the Office will be required to bear the increased costs of continuing to support its legacy systems as it moves forward with new projects and replacing its aging infrastructure step by step.

**Recommendations:** The restoration of funding in FY 2014 for projects curtailed in FY 2013 has helped the OCIO to recover, but the Office is still behind in terms of IT modernization efforts and must continue to move forward aggressively. The PPAC recommends that the USPTO continue to provide increased funding for IT, protect IT from future cuts, continue to modernize IT systems and replace legacy systems, expand support for the global IT community, and continue to upgrade and expand links with stakeholders.

### C. REQUESTS FOR CONTINUED EXAMINATION

The PPAC is pleased to report that progress was made during FY 2014 in reducing the backlog of requests for continued examination (RCEs) to 46,441 as of October 1, 2014.

Following the move of RCEs from the examiner's amended docket to the special continuing docket, the backlog of RCEs ballooned from about 17,000 in October of 2009 to over 110,000 in March of 2013; however, focused attention on RCEs had reduced the backlog to 78,272 at the end of September 2013. Further implementation of initiatives of the RCE Leveling Plan, which was developed from input gathered from a series of roundtables and focus sessions around the country, provided continued progress towards reducing the backlog of RCEs. Additionally, the efforts moved the oldest RCEs resulting in 52% of the RCEs being over four months from filing on October 1, 2014, compared to 73.4% of the RCEs on October 1, 2013. This is a commendable achievement.

Two programs instituted by the USPTO, the After Final Consideration Pilot 2.0 (AFCP 2.0) and Quick Path Information Disclosure Statement (QPIDS), have shown some positive results. QPIDS has allowed applicants to have new prior art considered by the USPTO without the need

for an RCE. From 2,241 processed QPIDS requests during FY 2014 (as of August 7, 2014), 1,934 continued on to issue without an RCE.

The USPTO provided the Patent Application Initiatives Web site to the public and internally to the examiners to provide a single online location where applicants and examiners can compare the advantages of various patent programs available to applicants during specific stages of prosecution. The USPTO is commended for the establishment of this useful tool.

**Recommendations:** The PPAC recommends exploring an avenue for resolution of issues in prosecution other than an appeal to the Patent Trial and Appeal Board, such as permitting applicant participation in the pre-appeal brief conference or the appeal conference that would permit an interview with multiple primary examiners in addition to the examiner of record. The PPAC also recommends that the Office place RCEs on the amended docket or establish a goal of four months to completion of an action. The PPAC recommends that the AFCP 2.0 be made permanent and that efforts be made for more consideration of amendments after final. The PPAC recommends providing the opportunity for the entry of two responses as a matter of right in each application and/or providing an option for paying for the consideration of one more amendment after a final rejection to reduce the need for appeals or filing of RCEs.

#### **D. HUMAN CAPITAL**

The sequester in FY 2013 severely limited the Office's ability to hire new examiners; however, with a stable budget and greater certainty moving forward, the Office has been able to increase the number of new hires in FY 2014 and return to its hiring goals for FY 2015 and beyond. The impact of stable funding resulted in the hiring of 964 new examiners in FY 2014 and a goal of adding between 400-600 new examiners in FY 2015. Furthermore, the Office saw a decrease in the attrition rate between FY 2013 and FY 2014. In FY 2013, the attrition rate was 3.94%, and in FY 2014 that rate decreased to 3.39%, a nearly 14% decrease during a time where there is an improving economy and higher job demand. This is largely due to the positive work environment that resulted in the Office being named the #1 Best Place to Work in the Federal Government in FY 2013.

In addition to the first satellite office in Detroit, Michigan, there is now a permanent satellite office open in Denver, Colorado, and temporary offices in Silicon Valley, California, and Dallas, Texas. A total of 137 examiners and 47 judges have been hired with an additional 112 examiners expected to be hired for these offices in FY 2015.

Currently, 59.4% of eligible examiners and 47.3% of all examiners work remotely in the hoteling program.

Efforts at attracting and maintaining a skilled corps of examiners is critical to effective examination of applications, reducing patent pendency, and reducing backlog.

**Recommendations:** The PPAC strongly recommends that the Office be provided stable funding to hire enough examiners to maintain appropriate levels in FY 2015 and beyond.

The PPAC recommends that the Office continue to support, promote, and expand the Patents Hoteling Program and telework programs, both of which permit examiners to work from remote locations. It also strongly recommends that the USPTO continue to put systems in place to properly manage these programs to measure productivity and monitor potential abuse.

Additionally, the PPAC recommends continuing to target experienced IP professionals for the available new examiner positions and to advance geographical expansion of the workforce and telework initiatives to attract a larger pool of well-qualified candidates and further enhance retention of experienced examiners for an entire career.

## **E. PATENT QUALITY**

The issuance of high quality patents with a reasonable pendency remains the most important priority for the USPTO. The Office made positive strides in addressing both patent quality and pendency during FY 2014.

The USPTO made positive strides in patent quality during FY 2014. The USPTO has identified at least three facets to world class patent examination quality: (i) providing the best work products and services at every stage of the patent process; (ii) improving stakeholder experience with the USPTO based on excellent customer service; and (iii) engaging stakeholders in partnership to educate and seek input. With respect to work products and services, the USPTO undertook efforts in FY 2014 to improve the measurement of patent examination quality through various initiatives including emphasizing quality early in the examination process, expanding information collected during the review of examiners' work product, and feeding review data back into the examination process at the earliest stage. In the legal training area, the USPTO has implemented a multi-phased legal refresher training program for all examiners that focuses on evaluating functional claiming and improving the clarity of the examination record. With respect to technical training, the USPTO is expanding its Patent Examiner Technical Training Program to provide more patent examiners with direct access to experts from industry and academics. In addition, the USPTO is expanding ways for the public to help examiners determine whether an invention is patentable by finding relevant prior art through the use of crowd sourcing.

The customer service/applicant experience continued to be a main focus for the USPTO. In FY 2014, the USPTO continued to provide all examiners with interview practice training. The

USPTO continued its focus on the independent inventor community by developing a pilot program that dedicates a team of specially trained patent examiners to examine pro se filed applications and work with pro se applicants during prosecution. The USPTO's customer support call centers continue to provide patent information and services to applicants and the public, including independent inventors, small businesses, and university-affiliated inventors.

A patent ombudsman program continued to enhance the USPTO's ability to assist applicants, such as independent inventors and small businesses, or their representatives with issues that arise during patent application prosecution. Moreover, the USPTO continued to conduct customer satisfaction surveys to measure satisfaction of applicants and practitioners with patent examination quality.

In the public outreach/education area, the USPTO has formed several partnerships with the stakeholder community to provide opportunities to bring stakeholders and the USPTO together to share ideas, feedback, experiences, and insight on patent related issues arising in specific technology areas. In addition, the USPTO held a public forum in May 2014 to receive public feedback on the USPTO's subject matter eligibility guidance.

The USPTO is committed to continuing to measure patent quality and refine the metrics utilized for the measurement, including finding a suitable set of measurements to replace/supplement the current patent quality index and engaging stakeholders on how best to gauge and improve patent quality. In FY 2014, the PPAC participated in initial discussions to review the quality index and related initiatives. The PPAC supports these efforts and looks forward to continued work with the Office on these initiatives.

**Recommendations:** The PPAC commends the Office for adopting the three-facet approach and other programs aimed at advancing world class patent examination quality. However, the PPAC recommends that the USPTO continue to provide training to examiners to have them conduct a complete initial search and to correctly apply the prior art to the claims. With respect to training, the PPAC recommends that the claim interpretation training section focus on, among other things, the "broadest reasonable interpretation standard" for interpreting claims.

The PPAC requests that the USPTO continue to review the examination process to consider ways to avoid a patent application from going to "final" status prematurely. For example, examiners should issue a second non-final office action if the prior art references cited in the second office action were not previously cited in the first office action if only minor changes were made in an amendment in response to the first non-final office action. In addition, the USPTO should consider ways to improve the quality of final rejections and find ways to increase consideration of after-final amendments. The USPTO should consider further changes to the AFCP 2.0.

The USPTO has been reviewing its patent quality composite index. The PPAC recommends that the USPTO use the actual numbers in determining patent quality during the different stages of the examination process, not report the numbers as a percentage of a goal or combining them into a single index that might inadvertently hide important data. The PPAC recommends against the continued reliance on the quality composite index as a bellwether of patent quality because the index may be misleading to the public.

## F. PATENT PENDENCY

The USPTO continued to make improvements to decrease pendency to first action and total pendency during FY 2014, achieving 27.4 months for total pendency and 18.4 months for pendency to first action. The increase in first action pendency from 18.2 in FY 2013 stems from a change in the RCE count system and examiner training, in particular for the adoption of the Cooperative Patent Classification.

Instrumental to these gains was a focus on moving the oldest new applications, hiring new examiners, and several initiatives implemented by the USPTO, including Track One, AFCP 2.0, and the Patent Prosecution Highway.

**Recommendations:** The PPAC recommends that the USPTO establish targets aligned with the congressionally-established Patent Term Adjustment (PTA) timeframes of 14-4-4-4-36 to reduce the amount of PTA granted in patents. Especially important is the establishment of a goal for completion of an action in RCEs, either as amended applications or four months from filing.

## G. PATENT TRIAL AND APPEAL BOARD

The USPTO's Patent Trial and Appeal Board (PTAB or Board) continued to make positive strides in 2014. At the end of FY 2014, the Board included 214 judges. Each of the satellite offices includes PTAB judges.

The backlog of *ex parte* appeals pending at the Board stood at 25,658 applications as of September 30, 2014. The backlog averaged about 25,800 applications for the year. The trend was relatively flat for the year, with the peak reaching 26,208 applications in January 2014, and the lowest levels reaching 25,594 in July 2014. The Board continues to implement a *per curiam* process, whereby certain appeals can be decided based on arguments by the examiners or appellants in the written record. The Board has affirmed or affirmed-in-part 67%, reversed 30%, and remanded or dismissed about 3% of the examiner's decisions.

The PTAB continued to be busy with *inter partes* review (IPR) and covered business method (CBM) filings in FY 2014, receiving a peak of 190 IPR/CBM petitions in June 2014. As of September 30, 2014, the Board received 2,082 total petitions since the inception of the AIA: 1,841 IPR proceedings, 233 CBM proceedings, two post-grant review (PGR) proceedings, and six derivation proceedings. The majority of the petitions were in the electrical/computer software area. In particular, the petition filings by area of technology were: 71.6% electrical/computer software; 15.6% mechanical; 6.8% chemical; 5.6% biotechnology/pharmaceutical; and 0.4% design.

The PTAB made significant outreach efforts in 2014. In particular, the PTAB hosted eight roundtables around the country in April and May 2014 to share information about the AIA trials. In addition to the eight PTAB roundtables, the USPTO issued a Federal Register notice dated June 27, 2014, titled *Request for Comments on Trial Proceedings Under the America Invents Act Before the Patent Trial and Appeal Board*. The Federal Register notice included two parts, one directed to non-rule comments and a second directed to 17 questions posed by the PTAB to elicit feedback with respect to certain AIA trial rules.

**Recommendations:** The PPAC recommends that the PTAB remain vigilant in hiring PTAB judges and explore other ways to handle the increased AIA workflow and to decrease the *ex parte* appeals backlog.

With respect to the AIA's requirement that the PTAB issue a written decision within a one-year period of granting the petition to institute, the PPAC notes that the AIA requires only a "good cause" showing to go beyond the one-year timeframe. Consequently, in appropriate cases, the PPAC believes that the PTAB should not be reluctant to exceed the one-year threshold if there is "good cause" for doing so.

With respect to the PTAB's claim amendment procedures, the PPAC recommends that the USPTO be more flexible in the PTAB claim amendment practice to make such amendments more available to patent owners.

The PPAC recommends that the USPTO implement pilot programs to expedite review of the pending *ex parte* appeals. The pilot programs may include allowing the patent owner or an anonymous third party to pay a fee to expedite the review of the pending appeal and changing the pre-appeal brief and/or appeal conference program to allow applicants to participate in the review.

## H. LEGISLATION

While the past few years have been focused on the passage and implementation of the AIA, the majority of legislative activity in the current year seems focused primarily on alleged patent litigation abuse. Both the White House and Congress proposed a number of both administrative and legislative actions to address various issues raised concerning abusive litigation tactics. While sometimes ascribed pejoratively to “patent trolls” or “non-practicing entities,” the PPAC notes that a consensus seems to be forming that it is less the status of a particular company, rather than the particular abusive actions taken, that bears the most fruitful attention.

The PPAC has continued to work closely with the Office as it reviewed and enacted the particular recommended administrative changes and will continue to do so. The PPAC was concerned this past year that these new mandates were placed on the Office, even as a significant amount of its funding was taken away under sequestration. The PPAC also remains concerned that the implementation of any such administrative actions must be carefully and thoughtfully tailored to attack exactly the right sorts of abuses, without unduly burdening patent applicants or preventing the rightful assertion of patent rights, which, after all, provide lawful rights to exclude others from practicing new, non-obvious, and useful inventions.

**Recommendations:** The PPAC will continue to monitor and consult with the USPTO as the legislative and administrative processes address allegedly abusive activities. The PPAC recommends that the USPTO ensure that any proposed administrative changes are appropriately and narrowly targeted for any such alleged abuse without unduly harming our overall patent system, the smooth operation of the examination process, the quality of patents issued, or the overall costs and burdens to applicants.

The PPAC was concerned that the Office of Management and Budget made the determination that USPTO user fees were also subject to sequestration. The PPAC recommends that the USPTO continue to work with the Administration and Congress to ensure that the USPTO has access to all of its fees.

## I. INTERNATIONAL COOPERATION AND WORK SHARING

The PPAC supports the creation of the Office of International Cooperation (OIPC) and its efforts to focus and provide a unified message regarding the USPTO’s global initiatives. The PPAC further believes that having such a coordinated group of USPTO representatives under the OIPC should somewhat lessen the impact of future budget cuts on the USPTO regarding global initiatives.

The PPAC supports the efforts made by the USPTO in its international cooperation and work sharing initiatives among multiple patent offices and encourages the continued development and expansion of these efforts, particularly, for example, the Patent Prosecution Highway Program, the Global Dossier Initiative, software search tools and databases, such as Common Citation Document and Global Patent Search Network, and the implementation of the Hague Agreement.

**Recommendations:** The PPAC recommends that the USPTO direct much more education, outreach, resources, and training to the user community to showcase the benefits of these important global initiatives. Additionally, the PPAC encourages much greater outreach to a varied audience of entities and groups from the user community for insight and input regarding current and future USPTO global initiatives. Finally, the PPAC recommends that the USPTO diligently review its efforts on an annual basis to ensure that the initiatives promote the overall objectives of harmonization and international work sharing and reduce duplication of efforts by patent offices as well as internally within the USPTO, while at the same time promoting best practices to improve timeliness and quality.

## J. USPTO OUTREACH INITIATIVES

In addition to the robust outreach activities conducted by the other outreach teams at the USPTO, the Office of Innovation Development (OID) oversees the Office's efforts to support American innovation, entrepreneurship, and job creation. Often working closely with other U.S. Government officials and agencies, the OID designs and implements outreach assistance programs to a wide range of stakeholders including independent inventors, women, small business concerns, university affiliates, minorities, and other underserved communities.

The OID also assists the Office's educational outreach programs that promote IP protection and the valuable role it plays as a key driver of the American economy. These programs are designed to educate the public about intellectual property in general as well as the specifics of the patent application process, including the intricacies of patent prosecution and post-grant patent issues. The post patent grant education includes the importance of patents and other forms of intellectual property in starting, building, and growing a business.

In addition, the OID and the Office of Education and Outreach work collaboratively on the development and delivery of educational materials, activities, and programs to promote intellectual property for students, educators, and young inventors and innovators of all ages, including a particular focus on Science, Technology, Engineering, and Math, also known as STEM.

The USPTO has restored and continues to expand its outreach activities to the inventor community now that the budget constraints due to sequestration have been lifted.

**Recommendations:** The PPAC commends the Office on the significant outreach efforts to the entire user community from women entrepreneurs and independent inventors, to bar associations and national organizations. The PPAC recommends that the Office continue to provide resources and outreach to all groups within the user community.

### I. FINANCE

#### A. INTRODUCTION

The USPTO continues its efforts toward establishing a sustainable funding model that provides the Office with a reliable and sustainable source of funding. The Office is 100% user fee funded and thus must operate like a business, providing services and charging fees projected to cover the cost of the services. Projecting fees is a constant challenge, as it requires the Office to predict user behavior often years in advance. The Office must take into account changes in global economic conditions, possible legislative and judicial changes, and potential Presidential Directives. Each of these, in addition to many other factors, has elastic effects on demand for the services of the Office and thus the funds available to the Office.

Notwithstanding these challenges, the USPTO does an excellent job of creating yearly budgets and updating the budget calculations throughout the fiscal year as conditions change. Most years, the USPTO's actual collections are within 5% of projected collections. Even so, in order to effectively manage the elasticity of demand, the Office must maintain two essential funds, the Salaries and Expenses Fund and the Patent and Trademark Fee Reserve Fund.

Additionally, the USPTO is committed to being responsive to the chilling effect on innovation of high user fees. In FY 2014, the USPTO finalized a policy prescribing the process for biennial reviews of the agency fee structure and will engage in a biennial fee review at the start of FY 2015. We commend the Office for undertaking these reviews to re-evaluate whether fees are commensurate with the Office's projected needs. We are particularly pleased with the outreach by the Office to the user community in July 2014 for input regarding pendency goals, which could have a direct effect on funding needs going forward. The stakeholder voice is essential to the legitimacy of the outcome.

#### B. SALARIES AND EXPENSES FUND

The Operating Reserve within the Salaries and Expenses fund enables the USPTO to sustain operations by absorbing costs as necessary in response to temporary changes in economic and operating environments.

Annually, Congress authorizes the USPTO to spend a designated amount of the fees it collects. The USPTO appropriation is available until expended. This permits the USPTO to carry forward the unobligated (unspent) fees for use in subsequent years. These unspent fees are set aside as an operating reserve, often referred to as carryover, and remain in the USPTO's appropriation account maintained in the U.S. Department of the Treasury.

The USPTO demonstrated the importance of an operating reserve receiving full access to its fee collections at the beginning of FY 2014 (October 1, 2013, to September 30, 2014). For the first 16 days of the fiscal year, there was no enacted appropriations bill. Without the passage of an appropriations bill, most federal agencies did not have authorization to expend public funds. As a result, the majority of the Federal Government shut down for 16 days. However, with sufficient prior fiscal year carryover funding available in its operating reserve, the USPTO was able remain open and fully operational during this time, despite a lapsed appropriation of funds. The USPTO collected approximately \$146 million in patent fees during the shutdown period. The ability of the Office to continue its mission, collect fees, and provide service to its fee-paying customers and public during the shutdown is a clear example of the importance of ensuring access to all of the fees the USPTO generates.

The USPTO is finalizing a policy to detail the process for assessing the optimal operating reserve size and to evaluate and maintain the operating reserve over time. The operating reserve policy will apply to unspent fees originally planned for spending for annual operating requirements and both planned and unplanned fee surpluses. The policy will provide guidance on establishing the size of the reserve, maintaining the established level, and roles and responsibilities.

### **C. THE PATENT AND TRADEMARK FEE RESERVE FUND**

The Patent and Trademark Fee Reserve Fund (PTFRF) was established by the Leahy-Smith America Invents Act (AIA) in 2013. This fund was enacted to ensure that *all* fees paid by customers of the USPTO to the Office for services rendered or to be rendered were available to the Office to cover operations and related expenses of the Office only, including supporting an operating reserve as described above. In the past, more than \$1 billion of user fees paid to the Office were instead unavailable to the Office. This fund is essential because, as additional work comes in, so will additional funds to cover the additional work. Without access to the additional funds, the Office must manage the additional load using fees paid by other users to the system (robbing Peter to pay Paul). The PTFRF fund is intended to ensure that the Office is authorized to deposit all fees collected in excess of appropriated (projected) fee level in the PTFRF. In such an eventuality, the USPTO can then access the deposited funds when needed by submitting a reprogramming notification to Congress.

The Office collected \$2,897 million in Patent fees in FY 2014, \$129 million more from users for additional work beyond that which was projected by the Office. These additional funds are expected to become available to the Office after Congress reviews the Office's request to retain these funds. These funds will be used for a variety of purposes including reducing the current patent application backlog, decreasing patent pendency, improving patent quality and customer service, and upgrading the Office's patent business information technology capabilities and infrastructure by building an operating reserve to mitigate the risk for incidents such as those

discussed previously. Most importantly, these funds are slated to go toward implementing a sustainable funding model. The PPAC strongly encourages that the promise made to the Office in the AIA, for the Office to retain these funds, be fulfilled.

#### **D. BIENNIAL FEE REVIEW**

The Office finalized a policy prescribing the process for biennial reviews of the agency fee structure this year and will engage in a biennial fee review at the start of FY 2015, pending the outcome of a patent pendency review with stakeholders. The review will include an examination of how well the current fee schedule supports achievement of the Office's strategic goals and objectives and fee structure philosophy. The review, conducted at least once every two years, includes the consideration of potential changes to USPTO fees, including the establishment of new fees, the removal of fees, and adjustments to current fees. The outcome of a biennial fee review could result in proposed regulatory actions to adjust fees to levels that will sustain desired operating levels for the long term.

#### **E. FISCAL YEAR 2014**

The USPTO requested access to \$3,071 million of user fees (\$2,808 million of which are patent fees) in its FY 2014 President's Budget. Congress appropriated the Office \$47 million less than the initial request, \$3,024 million. Of the appropriated amount, the USPTO has apportioned \$2,768 in patent fees. Throughout FY 2014, fee collections tracked above the appropriated level. At the end of the fiscal year, the Office collected \$129 million of patent fees above the appropriated level, which is the first deposit into the PTFRF. The USPTO is planning to submit a reprogramming notification for these funds, which will be the USPTO's first opportunity to access funds deposited in the PTFRF.

The USPTO began the fiscal year reacting to the impact from a number of funding challenges and implementation of provisions of the AIA experienced in FYs 2012 and 2013. Sequestration and uncertainty over the implementation of a new patent fee schedule affected operations in FY 2013, which required adjustments to budget plans in FY 2014. The USPTO collected lower patent fee revenue than it originally planned in the FY 2013 President's Budget due to the changes reflected in the new patent fee schedule. In addition, sequestration was implemented against total collections, which further impacted available resources in FY 2013. The USPTO took action by reducing planned obligations through a minimal hiring approach, which delayed plans to reach targeted pendency goals, deferred major IT spending, and cut other discretionary projects. With prudent fiscal management, the USPTO moved forward on a number of spending priorities to support the strategic plan objectives and goals. These priorities include patent pendency and backlog reduction, investments in information technology, completing implementation of the AIA, enhancing quality of patent examination by maintaining and

improving quality measurement, and opening its second permanent satellite office in Denver, CO.

Additionally, the USPTO implemented certain fee adjustments in December 2013 to align with the Patent Law Treaty and lowered issue and publication fees in January 2014 as part of the inaugural FY 2013 Patent Fee Setting and Adjusting rule.

## **F. FISCAL YEAR 2015**

The USPTO's appropriation bill is congressionally marked at \$3,458 million. The Office estimated FY 2015 fee collections in the FY 2015 President's Budget of \$3,442. Priorities for the upcoming fiscal year are a continuation of FY 2014 focuses, to include: reducing patent pendency and the backlog of unexamined patent applications, while working with stakeholders to refine long-term pendency goals that will meet the needs of both the Office and the IP community; opening an additional satellite office in San Jose, CA; continuing the transition to a sustainable funding model, which includes building the operating reserve and conducting the biennial fee review; enhancing patent and trademark quality by maintaining and improving quality measurement and improving the quality of patent and trademark examination; increasing the Patent Trial and Appeal Board's (PTAB's) ability to provide timely and high quality decisions; and ensuring optimal information technology service delivery to both employees and stakeholders by transitioning to next generation technology and services.

In response to concerns identified in the House FY 2015 CJS Appropriation Report language regarding the USPTO's IT infrastructure, the Office, with congressional authority, plans to increase IT spending above the planned level identified in the FY 2015 President's Budget. The resulting impact on increased fiscal year spending may reduce the estimated operating reserve level in FY 2015.

## **G. RECOMMENDATIONS**

FY 2014 has been a great year financially for the USPTO. However, it is as important now as ever to emphasize that a consistent funding stream and full access to fees for this 100% user-fee-funded agency is essential to the operation of the Office.

The PPAC is also very concerned regarding the PTFRF that was established by the AIA. The first deposit into the PTFRF was made this fall. This will be the first test of whether the USPTO will indeed have access to all user fees regardless of whether the fees are in excess of the Office's congressionally-approved appropriations. This will be the first test of whether the language of the AIA fulfills its stated purpose.

While we commend this step forward, we cannot ignore the continuing financial uncertainty that the Office is subjected to annually. As such, the PPAC again urges 1) the Administration to prevent the application of any future sequestrations of, or revenue diversions from, the Office and 2) for Congress to consider removing the Office from the appropriations process.

The PPAC will continue to monitor and consult with the USPTO as the appropriation and biennial fee review processes continue. We are confident that the USPTO will continue its outreach to all stakeholders, including the PPAC, to ascertain the appropriate fee schedule going forward.

## **II. INFORMATION TECHNOLOGY**

### **A. OVERVIEW**

In this Section of the report, the PPAC describes the information technology (IT) initiatives undertaken by the USPTO and the continued progress made this year in supporting the Office's overall objectives and strategic goals. Under the direction of the Office of the Chief Information Officer (OCIO), the USPTO selects, integrates, implements, and maintains information technology in support of improving patent quality, reducing pendency and backlog, advancing IP leadership in the United States and internationally, and building and maintaining a 21<sup>st</sup> century work environment.

In FY 2014, the OCIO accelerated the pace of IT development after sustaining drastic cuts during the prior year's sequestration. The Office significantly increased the IT budget this year in order to allow for the resumption of key initiatives such as Patents End-to-End and to continue to upgrade its aging IT infrastructure. The USPTO resumed hiring, engaged new contractors, restarted tabled projects, and increased IT spending by 71% (an increase of about \$262 million) from FY 2013 to FY 2014. The jump in spending this year was largely due to the restoration of funding for projects that had been brought to a dead stop in April 2013 during sequestration. This resulted in progress on work that had been deferred or delayed during the previous year's budget cuts. However, because of the latency in hiring and resuming projects that was noted in our previous report, the USPTO is still recovering from the sequestration and the IT infrastructure remains at risk.

Further increases in IT spending are planned and are necessary for FY 2015 and FY 2016 to continue projects that were put on hold during FY 2013, hire qualified staff to support new technologies as they are phased in, and maintain mission-critical systems during the transition to a new infrastructure. These additional incremental costs are needed not only to complete the long-delayed modernization of the Office's aging infrastructure, but also at the same time to support the increasing demands of a growing, distributed workforce, improved global work sharing and internationalization, ongoing threats to system stability and security, and increased

automation and streamlining of filings and processes—in essence, the OCIO is “changing the wheels” as the vehicle is not only still moving but increasing in speed.

The OCIO expects IT spending to taper and in fact plans lower spending in FY 2017 and beyond, as the new systems take over and the Office no longer has to bear the costs of supporting both the legacy systems and new technologies. Baseline IT spending in the out years is still expected to be higher than FY 2012 or FY 2013 (during sequestration) due to higher labor costs and a much larger examiner corps; however, the spending profile reflects the projected cost-effectiveness of IT spending once the legacy systems are retired.

	FY 2012 Actual	FY 2013 Actual	FY 2014 Actual	FY 2015 Planned
<b>Total USPTO IT Spend (in \$1000s)</b>	<b>\$ 391,488</b>	<b>\$ 367,674</b>	<b>\$ 629,764</b>	<b>\$ 763,374</b>
Non-OCIO Total	\$ 42,324	\$ 41,388	\$ 89,064	\$ 81,748
OCIO Total	\$ 349,164	\$ 326,286	\$ 540,508	\$ 681,626
OCIO Compensation	\$ 64,963	\$ 72,466	\$ 79,966	\$ 107,324
OCIO Total Non-Comp	\$ 284,201	\$ 253,820	\$ 460,733	\$ 574,302

## B. MISSION OF THE OCIO AND STRATEGIC IT OBJECTIVES

In alignment with the USPTO’s overall strategic goals of improving patent quality and reducing pendency, the OCIO is responsible for deploying and maintaining modern IT systems and infrastructure that improve quality and efficiency, for example, by helping examiners to work productively and effectively and by supporting communication and coordination with the user community and international stakeholders.

As the PPAC has reported in previous years, the Office has undertaken a set of modernization initiatives to drive these objectives, with a portfolio known as “Patents End-to-End” (PE2E) as its mainstay. PE2E, as its name indicates, is a set of IT systems aimed at streamlining the processing of patent documents and actions from their inception to their downstream archiving. At its core, PE2E implements an advanced data architecture based on open, text-based industry standards such as the Extensible Markup Language, or XML, moving away from proprietary, image-based approaches that are behind some of the USPTO’s legacy data-handling systems. In addition to offering opportunities for enhancements to patent quality (for example, through better search capabilities, collaboration among examiners and offices, and consistency in office actions), the PE2E portfolio comprises part of the Office’s need to upgrade an aging IT infrastructure, a challenge faced by all large-scale organizations.

In FY 2014, the OCIO revived dozens of projects that had been de-funded or had funding reduced during the budget cuts of FY 2013. This entailed selecting and engaging new contractors to perform highly skilled technical work, as well as hiring over 100 new IT employees. Because of the timing of bringing on and training new people and deploying them to projects, some of the projects that had been delayed could not be resumed until late in the fiscal year. However, as of the time of this report, the OCIO is on track in terms of recovering ground lost during the previous year. Nearly every delayed project has been at least restarted. Additionally, the IT staff has met the ongoing requirements of the America Invents Act and international initiatives such as Cooperative Patent Classification (CPC) and Global Dossier. The OCIO has also done a commendable job of stabilizing legacy systems that could not be upgraded.

### **C. IT MODERNIZATION AT THE USPTO**

In its strategic plans and budget requests throughout recent years, the Office has noted the need to modernize its aging IT infrastructure and systems, as well as pointing out the potential costs to stakeholders of having out-of-date systems (due to potential inefficiencies and downtime) along with the opportunities for improvements (due to collaboration and improved workflow and examination practices). As noted above, the OCIO has launched a number of mission-critical initiatives to improve IT infrastructure, processes, and systems.

The PPAC recognizes that the approximately \$262 million increase in IT funding for FY 2014 over the reduced \$368 million expenditure in FY 2013 was a necessary and positive increment. It must be acknowledged, however, that this funding has simply put the Office back on the right track as far as IT is concerned and that continued and even faster progress must be made in order to overcome the deficiencies that have been repeatedly stated in these reports and in the Office's plans and budget requests. FY 2014 has been a year of recovery—the current situation shows the harm that was done as the result of budget cuts and uncertainty, along with the improvements that may come from stable funding and budget clarity. Given the inertia that must be overcome in restaffing, restarting projects, replanning in the face of new conditions and requirements, and programming and testing complex systems, it will take years more for the Office to get to where it should be in terms of IT systems modernization.

The Patent Application Location and Monitoring system (PALM) is an excellent example of an aging USPTO mission-critical system. PALM is the backbone database and transaction processing system that records and tracks actions related to patent applications throughout the Office. It was designed for mainframe computers in the 1980s, and, while it has been updated on various occasions, it has not been replaced. Key portions of PALM were slated for modernization at the onset of the PE2E investment, but these portions are still maintained as legacy products because of the cutbacks to PE2E mentioned above along with the higher priority

given to other projects discussed here, such as CPC, One Portal Dossier, and Global Patent Search Network (GPSN). The longer legacy replacements and enhancements wait, the more resources are required simply to keep obsolete systems running and the greater the risk of serious system failure.

Other examples of aging mission-critical systems include those used for prior art searching during examination. Examiners currently use search systems known as EAST (Examiner Automated Search Tool), WEST (Web-based Examiner Search Tool), and a set of external databases often referred to as NPL (Non-Patent Literature), as well as some of the same facilities available to all through the Internet. The Office-specific tools, upon which examiners rely most heavily for patent searching, were built upon a proprietary framework developed by a company then known as BRS Search. Like PALM, this custom framework was state of the art during the 1980s and was slated for replacement with the PE2E search framework, which uses current open source software. The new PE2E search facility was tested in 2012 and used in 2013 for Chinese-language patents as part of the GPSN project, but its development and deployment to examiners was put on hold during the FY 2013 budget cuts. Work on this initiative has resumed, but this is another instance where the Office is still behind and playing catch-up. Efficient and effective search is clearly a crucial part of examination: as noted elsewhere in this report, the PPAC notes that conducting a thorough and effective search early in the examination process is a key goal in improving quality in examination processes and work product. The PPAC is concerned that a growing examiner corps is being tasked to undertake an increasing number of prior art searches at a time when the supporting systems are basically unchanged from where they were when the USPTO recommended their upgrade years ago.

These examples illustrate that, while the IT funding situation has improved and work is progressing with deliberate speed, the PPAC notes the ever urgent need for aggressive development in IT at the same time that it is pleased with the improvements in funding and commends the OCIO for progress during FY 2014.

#### **D. OCIO PROGRESS IN FY 2014**

Since our last report, the PPAC has noted that substantial progress has been made in the following areas.

##### **1. Patent Examination Tools & Infrastructure**

The Patent Examination Tools & Infrastructure projects include a set of integrated workflow, case management, and viewing and search tools to help examiners work productively and effectively. Some examples of the new functionality included in these tools are advanced claims management (including claims tree and claims analysis), reference management, and the ability

to search within a pending patent application. During FY 2014, upgrades to the Examination Tools included an enhanced viewing tool compliant with the electronic Desktop Application Navigator (eDAN) docket viewer currently used by the examiner corps. These enhancements included uploading and viewing references and information disclosure statements (IDS) as well as note taking and workflow planning. Complete parity with eDAN, as well as release to the complete corps of examiners and supervising patent examiners, is planned during the next year.

## **2. Global IT Systems**

### **a. Cooperative Patent Classification**

Cooperative Patent Classification (CPC) harmonizes patent classification system between the European Patent Office and the USPTO. Because CPC differs from the systems previously used at the USPTO, additional technical resources are needed to search across CPC patent classes, as well as to assign CPC codes to patents. Work on CPC in FY 2014 included a Classification Allocation Tool to assist examiners in cooperatively assigning patent classes, as well as a Transfer & Search Assistance Tool to help transfer applications, two additional steps toward automating the reclassification of patents according to CPC.

### **b. Global Dossier and One Portal Dossier**

Global Dossier is a set of projects to facilitate global work sharing by transmitting patent data from the USPTO to its overseas partners, as well as provide access to patent data from other IP5 offices (representing, outside of the United States, China, Korea, Europe, and Japan). One Portal Dossier is a part of the Examiner Tools & Infrastructure component of the PE2E portfolio, through which examiners will be able to view non-USPTO patent dossiers using the same viewers that help to process U.S. applications. During the coming years, the Office plans to offer public access to foreign dossiers, such as that currently available through the Patent Application Information Retrieval (PAIR) system.

## **E. RECOMMENDATIONS**

The PPAC believes that IT development and modernization efforts at the OCIO have produced valuable results in support of the USPTO's mission. In last year's report, the PPAC recommended a large budget increase for IT and further recommended protecting critical IT projects from budget cuts. The USPTO and the Administration granted IT a large increase for FY 2014 and have planned further increases for the future, with the understanding that IT spending will be reduced as legacy systems are replaced. Progress must continue in the following areas:

## **1. Continue to provide increased funding**

As discussed above, the dramatic mid-year cuts in FY 2013 significantly compromised mission-critical IT systems at the Office and derailed modernization efforts aimed at improving quality and reducing pendency, among other strategic objectives. In order to reverse this and have a chance at catching up, significant increases in the IT budget were required for FY 2014. Stable funding is envisioned during the coming years due to the greatly improved budget situation at the USPTO. The Office must continue to invest in IT systems and to guard against the kind of events that led to the disruptions in IT projects and modernization during the previous year.

## **2. Continue to modernize IT systems and replace legacy IT systems**

While the OCIO has made great progress in stabilizing IT systems, some of the systems, particularly PALM, continue to be obsolete, resulting in threats to the organization as every system failure leads to productivity losses from a growing workforce dependent on electronic systems. The Office must move forward aggressively with its efforts to modernize these systems and replace legacy systems as necessary. For the next two years, at least, this means that the Office will bear the high cost of maintaining a number of legacy systems at the same time that it invests in projects that will ultimately replace these systems. Additionally, the Office must hire new technical staff that are skilled in current technologies at the same time that it pays for the specialized skills required to maintain systems that are out-of-date. This is an expensive situation to be in, but the PPAC sees no alternative for the Office but to pay the price of finally moving to a current-day IT environment, particularly for the infrastructure that supports the work of examiners and the fee-paying user community. Once the price is paid, system development and maintenance should progress more efficiently and IT budgets as a percentage of total operations should decline significantly.

## **3. Expand support for the global IT community**

Technology support for globalization, such as One Portal Dossier and CPC, continued to be bright spots for the OCIO in FY 2014. These projects must continue, since these efforts are centerpieces of harmonization activities with the other key patent offices and with stakeholders of our global trading partners, as the USPTO moves forward with its vision of leading the world in IP protection and policy.

## **4. Continue to upgrade and expand links with stakeholders**

While much of this report has focused on the role of IT in support of workforce productivity and effectiveness, the OCIO also plays a significant part in stakeholder service and in expanding links with the nation's and world's IP community. Certain efforts, such as Text2PTO and

enhancements to the USPTO's Web site, were scaled back in FY 2013 and must pick up again in the future. Additionally, the Office should examine all customer-facing systems as part of ongoing quality initiatives and IT work should be slated to continue to improve these systems. The PPAC further recommends that the Office expand its engagement with the user community (for example, in its work on Text2PTO) to educate the public and make the most of the benefits of streamlined, text-based systems for the user community, such as in enhanced searching and easier compliance.

### **III. REQUESTS FOR CONTINUED EXAMINATION**

#### **A. INTRODUCTION**

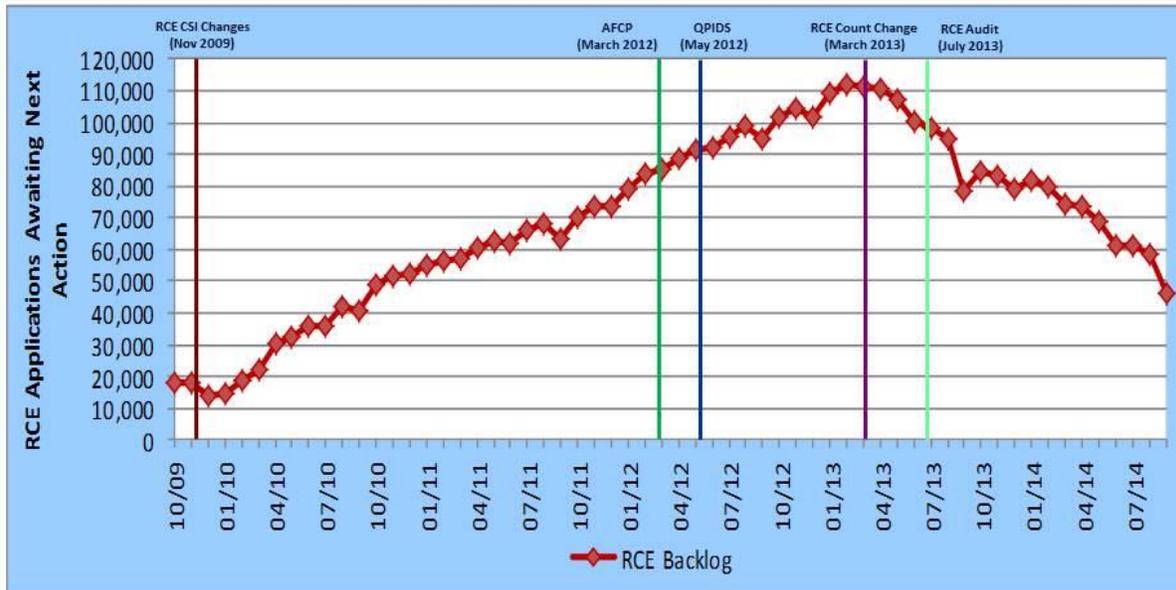
Requests for continued examination (RCEs) have become a necessary part of examination for many patent applications because it has become increasingly difficult to reach agreement on allowable subject matter with current compact prosecution processes and a single opportunity to modify claim language following rejections based on the prior art. In many cases, in order to further pursue the invention, the filing of an RCE has now become more or less essential. This represents a cost to applicants, but the bigger negative consequence of an RCE is the delay experienced in the middle of a "continued examination." Thus, RCEs continue to represent a problem for applicants in being both a vehicle and impediment to the goal of receiving a patent for their inventions. Through a series of initiatives developed by the Patents RCE team, led by Commissioner for Patents Peggy Focarino and Deputy Commissioner for Patent Operations Andrew Faile, significant inroads into the backlog of RCEs was made during FY 2013 and continued during FY 2014 in reducing the backlog of RCEs.

Following the move of RCEs from the examiners' amended docket to the special continuing docket, the backlog of RCEs ballooned from about 17,000 in October of 2009 to over 110,000 in March of 2013, as can be seen in the chart below. During FY 2013, in cooperation with the PPAC, the USPTO held a series of roundtables and focus sessions around the country and from the input, developed a number of initiatives, which were divided into Phase 1 for fast implementation and Phase 2 for later implementation. The PPAC was a key participant and supporter of these roundtables and sessions. Changes made to the count system and focused attention on examining RCEs led to a reduction in the backlog of RCEs to 78,272 at the end of FY 2013 (September 2013). Continued efforts and implementation of Phase 2 of the RCE Leveling Plan provided further reductions to 46,441 at the end of FY 2014. These are impressive achievements.



## RCE Backlog FY 2010 – FY 2014

U.S. Department of Commerce

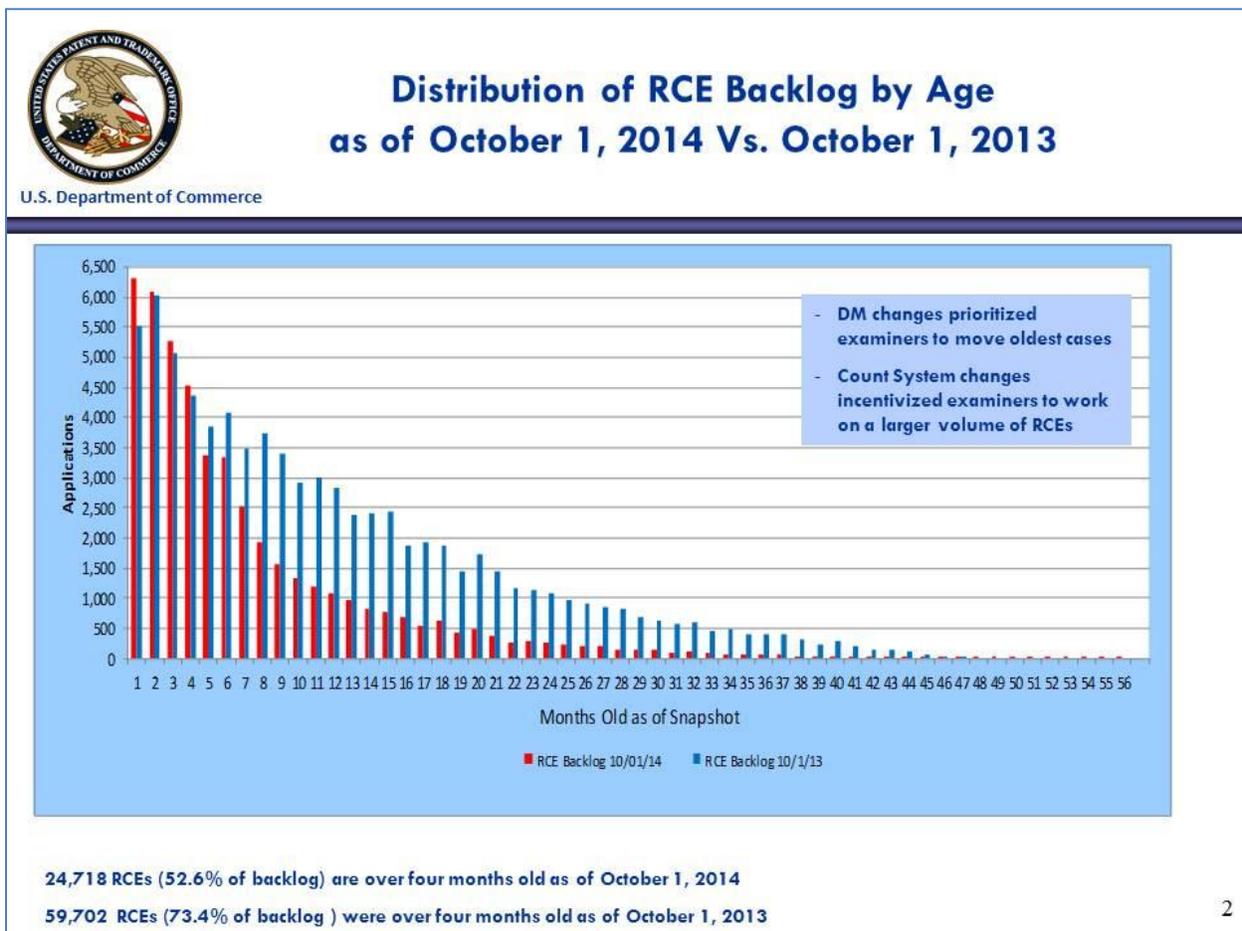


46,441 as of September 30, 2014.

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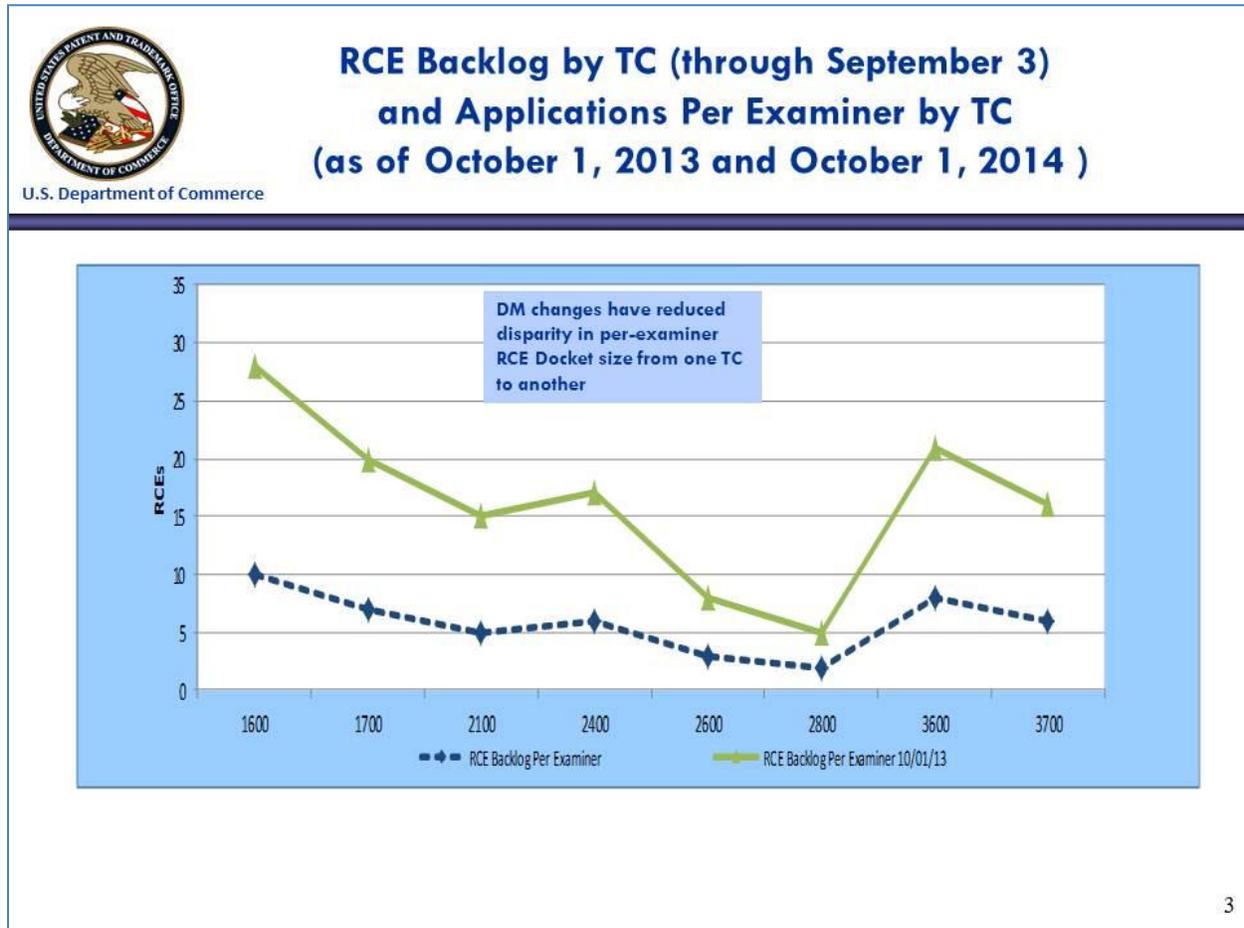
As a result of the move of RCEs from the amended docket to a continuing new case docket, the time between filing of the RCEs and the first office action rose from about two to three months previously, to one to two years in FY 2013, representing a truly significant gap in the prosecution of “continued examination,” leading to increased applicant frustration and dissatisfaction. Stemming from the implementation of the RCE Leveling Plan, Phases 1 and 2, the time to completion of an action has shortened. As the RCEs were completed, the overall age of the RCEs awaiting an action has been reduced. The following chart shows the distribution of the RCE backlog by age as compared between October 1, 2013, and August 6, 2014. It can be seen that significant progress has been made in all ages of the RCEs with the oldest RCEs specifically being targeted. This also represents an achievement worthy of praise. However, it can be seen that approximately 24,150 RCEs (52%) of the total are older than four months, an improvement from the 73.4% as of October 1, 2013. Consequently, because RCEs technically are amended applications and Patent Term Adjustment (PTA) begins accruing at four months from the RCE request, all RCEs older than four months will receive PTA of varying amounts of time when actions are completed on them. Of real concern, there still seem to be about 1,700 applications more than 24 months old awaiting an action. As a public policy matter, the public should have certainty about when they will be able to utilize patented technology. Granting PTA should be

an unusual event; it should not occur in large numbers of applications. The Office eliminated a deadline for completing RCEs with the move of RCEs from the amended docket, and as a consequence, significant delays in the prosecution have occurred. This is particularly problematic because, when an RCE is requested, an abandonment is counted and the pendency for that application is captured in the Traditional Total Pendency numbers. However, the pendency for the continued examination of the RCE is not included in the Traditional Total Pendency statistics. It is captured only in RCE pendency and Traditional Total Pendency including RCEs statistics reported only on the USPTO Patent Dashboard. To provide real “continued examination” in RCEs, the applications must be picked up for examination quickly and an established goal for completion of an action is essential. RCEs are amended applications and should be treated consistently as such. They should be returned to the amended docket. If that cannot be arranged, in the short term a goal of four months absolute for completion of RCEs would, at least, align with the congressionally-mandated PTA timeframe for completion of amended applications.



The reductions in the overall RCE backlog have resulted in reductions in the backlog of RCEs per examiner in each Technology Center (TC). According to the chart below, one can see

reductions in all TCs. It is noted, however, that significant differences exist among the TCs for how many RCEs occur per examiner. An examination of what drives these differences might assist in reducing the need for RCE filings.



For the past few years, the USPTO has been seeking input from the PPAC and the public and developing initiatives to improve processes, reduce the backlog of RCEs, and find ways to reduce the need for filing RCEs. These programs, including the AFCP 2.0, QPIDS, and Phase 1 of the RCE Leveling Plan, have shown some success. The backlog of RCEs has been dramatically reduced and QPIDS has allowed applicants to obtain consideration of references cited in an IDS after payment of the issue fee in many situations without requiring the filing of an RCE, as shown in the statistics below. These positive outcomes are applauded.

A preliminary External Survey of the AFCP 2.0 provided encouraging responses in being somewhat or very effective in advancing prosecution and 62% of the respondents stated that the pilot was likely to reduce the likelihood of filing an RCE. Perception is valuable, but an actual evaluation of those applications in which the AFCP 2.0 was requested and their outcomes would assist in the evaluation of this pilot. It could be determined in what percentage of the

applications the amendment was entered and in what percentage of the applications an RCE was subsequently filed.



**Quick Path Information Disclosure Statement (QPIDS)  
FY 2012 – FY 2014**

U.S. Department of Commerce

QPIDS	FY 12	FY 13	FY 14	Total
Total Number filed	498	1,373	2,449	4,320
Total QPIDS completed process	327	1,171	2,241	3,739
• # Corrected NOAs mailed	280	997	1,934	3,211
• Total # of RCEs processed	47	172	307	526

## B. NEW INITIATIVES

A new Web page initiated by the USPTO during FY 2014 is the Patent Application Initiatives (PAI) program. It is a single online location where applicants and examiners can compare the advantages of the patent programs available to applicants during various stages of prosecution. It provides detailed information that can be used to evaluate the various programs and is displayed as both a timeline as well as a matrix (grid) to provide different ways of considering the programs. Since the external launch in September of 2013, the Web page has received over 35,000 visitors. The internal site was launched in June of 2014 to include additional examiner information, including items such as time codes reported by examiners on their time sheets. This tool is a very valuable consolidated view of what programs might be available to an applicant at any point in time and represents a major step forward in presenting a picture of the many programs which have been developed. The PPAC recommends the use of the tool and congratulates the USPTO on its creation.

In conjunction with the AFCP 2.0, additional training was provided to examiners, which may assist in making that program more effective.

Some additional initiatives that are being developed include internal USPTO advanced training in after final practice and compact prosecution, how to effectively review an application, how to better identify allowable subject matter, and continuing one-on-one training for those examiners with a large number of RCEs. Additionally, the USPTO is targeting claim construction training for practitioners. All of these training initiatives should provide value and assist in the reduction of RCEs. The effort does take actions from both the examiners and the practitioners to speed

prosecution to conclusion. It is believed that both examiners and practitioners could benefit from training on claim construction. Practitioners could benefit from a better understanding of how examiners view claims in the broadest reasonable interpretation, and examiners could benefit from training about what is a broadest reasonable interpretation.

Significant progress has been made on RCE backlogs and much creative thinking has been advanced by the RCE team—Andrew Faile (Deputy Commissioner for Patents), Remy Yucel, Dan Sullivan, Bonnie Eyler, and Kathy Matecki—with support and encouragement by the management of the USPTO, Michelle Lee (Deputy Under Secretary) and Peggy Focarino (Commissioner for Patents). These continuing efforts are vital to providing success and represent a constructive dialog with both the PPAC and the public in finding programs and solutions that assist applicants and the USPTO.

The reduction in the RCE backlog from a high of 110,000 in March of 2013 to 46,441 at the end of FY 2014 represents a significant achievement, and the PPAC applauds this effort and result. Implementation of various programs, including the AFCP 2.0, PAI, and QPIDs, demonstrates leadership and flexibility in identifying multiple approaches to the problem. Continuing to find ways to improve and modify the initiatives, along with new ones, is critical to the successful reduction of RCEs. The deployment of the PAI to educate the public on the availability of the multitude of programs is especially noteworthy. Continued training for examiners, supervisors, and practitioners to increase understanding of proper rejections and how to work together more effectively can only assist these efforts.

The progress to date is worthy of praise, but there are always ways to make additional improvements, and the PPAC looks forward to continuing the dialog with the USPTO and providing help and suggestions to find ways to get to allowance faster and reduce the need for RCEs.

### **C. RECOMMENDATIONS**

The PPAC recommends that RCEs be returned to the amended docket because they are actually amended applications, not new applications. Alternatively, because PTA begins accruing at four months, the USPTO should set a goal for completion of RCEs within four months of filing. This should not be an average but rather a goal for completion of all RCEs within that timeframe. PTA should not be granted in these applications, and efforts should be made to reduce the gap in prosecution in the “continued examination” applications. Additionally, RCEs should be segregated from the serialized filings and identified separately in the count of new applications because, in fact, they are not new applications but continued prosecution under the same serial number.

The PPAC recommends that the AFCP 2.0 be made permanent and that efforts be made for the consideration of more amendments after final. For example, an amendment incorporating two dependent claims into an independent claim should not be considered as requiring a new search. While that exact claim was not previously presented, it is hard to understand how the concepts of those claims were not searched and art relevant to each claim was not uncovered in most situations. Encouraging the entry of modest amendments to the claims would help reduce the need for RCEs.

The PPAC recommends providing more alternatives rather than the filing of RCEs during prosecution. Increasingly, applications require more than one response in order to reach allowable subject matter. Providing the opportunity of the entry of two responses as a matter of right in each application and/or providing an option for paying for the consideration of one more amendment after a final rejection could assist both applicants and the USPTO.

The PPAC recommends that the USPTO permit applicants to participate in an interview in the pre-appeal brief conference and/or the appeal conference. It is believed that having the opportunity to make arguments in person in real time to respond to positions taken by the Office would reduce the need for RCEs and appeals to the PTAB. Also, it seems that even more understanding by the Office and practitioners of the invention and prior art occurs when there are supervisors present in the interviews, leading to more significant advancement of the prosecution towards agreement. Thus, providing these interview opportunities with the examiner, a supervisor, and in some instances, another senior person, would assist the USPTO and applicants in finding resolution in the cases without the need for an RCE or appeal. This is a desired outcome from all perspectives. It appears that the investment of more time for these interviews would pay dividends in the reduction of overall work for examiners and the PTAB, making it a wise investment. A pilot with a fee could be developed for such a program to test the outcomes.

The USPTO should evaluate the count system and what behaviors it is incentivizing. For example, since the change in counts that now provides credit for the completion of a final rejection, has the incidence of final rejections increased? Are there ways to incentivize more consideration of amendments after final to offset the incentives (more counts for examiner production available in the RCE) that may push for the filing of an RCE? How often do final rejections cite new prior art identified by examiners, particularly prior art which was also applicable to the claims as filed?

The PPAC recommends that efforts be made to target and examine the oldest RCEs, particularly the large number older than 24 months.

**IV. HUMAN CAPITAL**  
**A. INTRODUCTION**

The value in an organization comes from its people, and the Office has been fortunate to have been able to build and retain a workforce of dedicated examiners. The sequester in 2013 severely limited the Office’s ability to hire new examiners; however, with a stable budget and greater certainty moving forward, the Office has been able to increase the number of new hires in FY 2014 and return to its hiring goals for 2015 and beyond. During FY 2013, due in significant part to budget constraints, only 559 new examiners were hired instead of a planned 1000, representing a significant decrease from the 1507 new examiners hired during FY 2012. Furthermore, the planned hiring of 1500 examiners in FY 2014 had been reduced in the President’s Budget to 250. The impact of stable funding resulted in the hiring of 964 new examiners in FY 2014 and a goal of adding 400-600 new examiners in 2015. Furthermore, the Office saw a decrease in the attrition rate between 2013 and 2014. In FY 2013, the attrition rate was 3.94%, and in 2014 that rate decreased to 3.39%, a nearly 14% decrease during a time where there is an improving economy and higher job demand. This is largely due to the positive work environment that resulted in the Office being named the #1 Best Place to Work in the Federal Government in 2013 (see <http://www.uspto.gov/news/pr/2013/13-40.jsp>).

The Office continues to look for examiners with previous patent experience. The Office anticipated that such experienced patent professionals would require less training and thus would have the ability to start examining patent applications sooner. Of the 868 new examiners hired, 33 are experienced patent professionals. Over the past three years, the Office has added 232 experienced examiners to the Corps.

In 2012, the first Satellite Office in Detroit, Michigan, opened for business. In addition to the first satellite office in Detroit, Michigan, there is now a permanent satellite office open in Denver, Colorado, and temporary offices in Silicon Valley, California, and Dallas, Texas. The hiring holds that were placed on these new offices during the sequester have been lifted and a total of 137 examiners and 47 judges have been hired. An additional 112 examiners are expected to be hired for these offices in 2015:

Satellite Office	Examiners	Judges	2015 Expected Hire
Detroit	74	8	0
Denver	63	9	37
Silicon Valley	0	19	50
Dallas	0	11	25

The PPAC recommends continuing to target experienced patent professionals for the available new examiner positions and to advance distributed workforce initiatives to attract a larger pool of

well-qualified candidates and further enhance retention of experienced examiners for an entire career.

## B. EXAMINER HIRING AND RETENTION

After hiring only 538 examiners in 2013, the Office, due to stable funding, was able to hire an additional 964 examiners in 2014, of which 33 were experienced IP professionals. The attrition rate decreased from 3.94% to 3.39% and can be attributed largely to the positive work environment. By comparison, the attrition rate just five years ago (FY 2009) was 6.3% (5.6% excluding transfers and retirees). While the Office continues to focus on a number of initiatives to increase retention and employee satisfaction, it is also important to note that the attrition rate is historically lower during more challenging economic conditions. Accordingly, the PPAC recommends that the Office continue to focus on initiatives to further reduce attrition and keep experienced, productive examiners.

Fiscal Year	New Hire Goal	Actual New Hires	Examiner Attrition	Total Number of Examiners	Net Change (Year-Over-Year)
2014	1000	964	276	8,550	688
2013	1000	559	373	7,958	186
2012	1500	1507	280	7,831	1,146
2011	1200	836	223	6,685	557
2010	350	276	277	6,128	-17

The PPAC believes that it is important to continue to hire examiners and maintain the low attrition rates to allow the examiner ranks to grow to appropriate levels. The Office has set a revised goal of hiring 400-600 examiners in FY 2015, to enable it to reduce the backlog and meet its continued operating goals.

Attracting and maintaining a skilled corps of examiners is also effective in reducing the learning curve of examination of applications and reducing backlog. The PPAC strongly recommends that the Office be provided stable funding to hire enough examiners to maintain appropriate levels in FY 2015 and beyond.

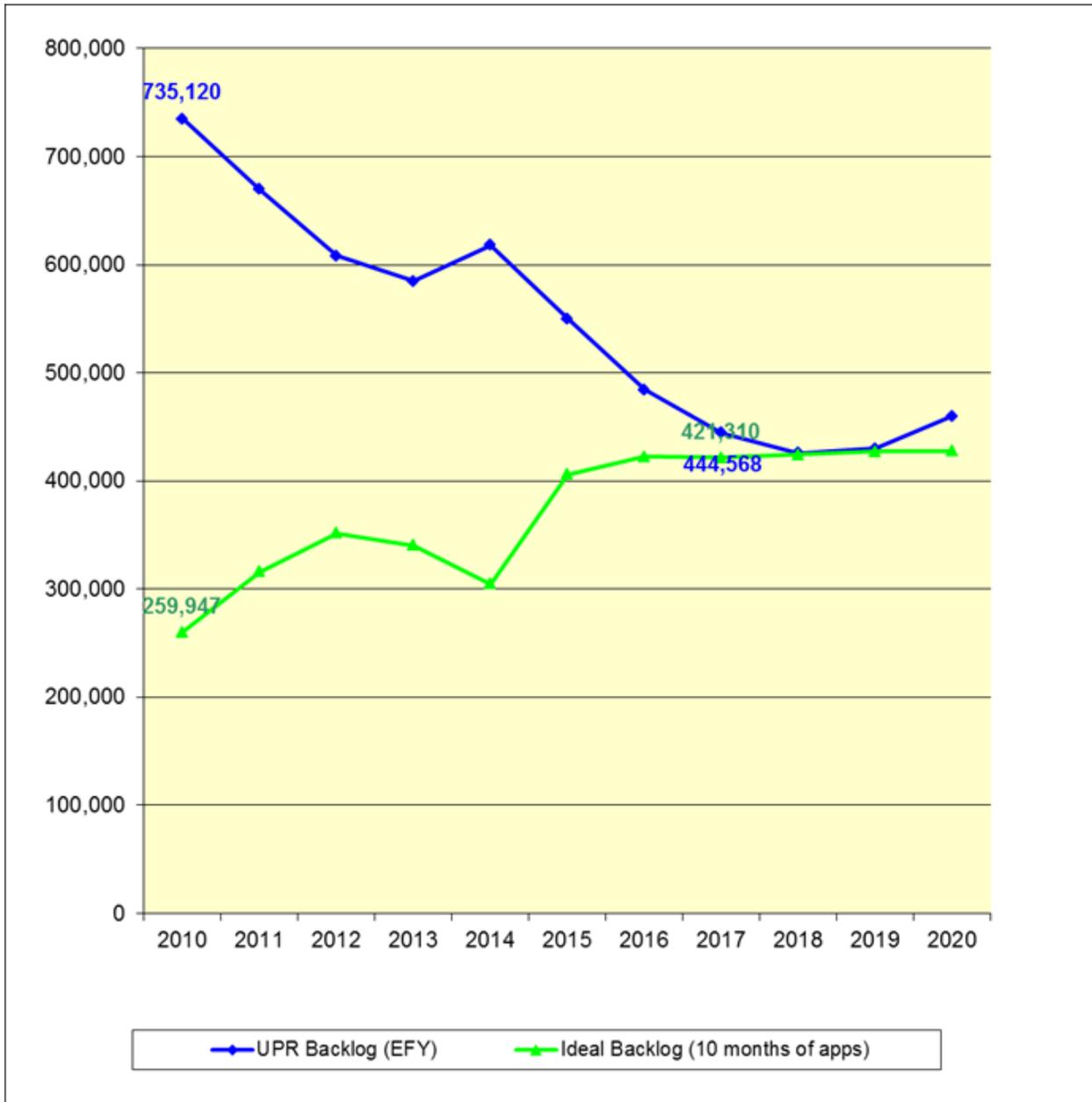
## C. EFFECTS OF UNCERTAINTY VERSUS STABILITY IN BUDGETS ON HIRING

Funding, and specifically the sequester, had a substantial impact on hiring during FY 2013.

Roughly 80% of the Office's budget is non-discretionary (payroll and overhead), and the Office's ability to react to the sequester was therefore limited. As a result, during FY 2013, the Office needed to significantly reduce its hiring goals. Only 538 new examiners were hired in FY 2013, falling far short of the original goal of hiring 1500 new examiners. In addition, there were no hires in three of the four new satellite offices, nor were there any plans to hire for these offices in FY 2014.

With stable funding in place for FY 2014, a dramatic improvement was achieved, resulting in 964 new examiners hired, including 137 examiners hired for the satellite offices.

Illustrated below is the impact of hiring on pendency to first action:



#### D. INITIATIVES TO INCREASE EXAMINATION CAPACITY

In light of the recent budget constraints, the Office has instituted and furthered a number of initiatives to make the most of its current Examiner Corps. Several of these initiatives are described below:

## **1. Develop Hiring of Experienced Patent Professionals**

During FY 2010, the Office initiated a new hiring model to encourage individuals with previous patent experience to apply for a position as a patent examiner. This model was intended to place more emphasis on recruiting candidates with significant patent experience while previous hiring focused more on technical background/experience. The hope is that experienced patent professionals would require less training and thus would have the ability to start examining patent applications sooner.

Since 2010, the Office has consistently been able to hire experienced patent professionals. In FY 2014, the Office added 33 on top of the 199 it had already hired in the past two years. Since this program began, the Office has added 388 new examiners with previous patent experience. The PPAC encourages the Office to continue with this program.

## **2. Target Overtime and Backlog Areas**

The Office has used overtime and awards as an efficient way to manage its workload and reduce the backlog of applications in addition to new examiner hires. With stable funding in FY 2014, the Office was able to use overtime to help reduce the backlog. The PPAC believes that continued judicious use of overtime and incentives can be helpful in reducing the backlog of applications.

## **3. Nationwide Workforce**

The Office has been successful in developing a nationwide workforce. The USPTO's workforce consists of employees that work at locations other than the Alexandria headquarters, thus allowing employees to choose where they desire to live. This segment of USPTO employees either participates in the Patents Hoteling Program (PHP) or works from the USPTO satellite offices in Detroit, Denver, Silicon Valley, or Dallas.

There are currently 3,897 examiners that participate in the PHP. This group is comprised of two segments: employees whose worksite is within 50 miles from the Alexandria campus and those with a worksite greater than 50 miles from the Alexandria campus. Currently, 59.4% of eligible examiners and 47.3% of all examiners work remotely in the hoteling program. This represents a slight increase over 2013.

The PPAC recommends that the Office continue to support, promote, and expand the PHP, which permits examiners to work from remote locations. It also strongly recommends that systems be put in place to properly manage this program to measure productivity and monitor potential abuse.

Further, the PPAC continues to support the Telework Enhancement Act Pilot Program (TEAPP) that provides more flexibility regarding employee travel requirements. TEAPP began in January 2012, and participation was limited to 25% of full-time teleworkers (hotelers). In July 2013, the TEAPP Oversight Committee reached agreement with the three bargaining units to expand the participation level in the pilot program to 25% of all employees eligible for the PHP (i.e., GS12 and above). As of the end of the third quarter, the 25% of eligible employees represented 1,605 participation slots for TEAPP. The Office currently has 1,547 participants and 58 slots remaining to be assigned.

#### **4. New Programs**

New programs allow employees to take law school courses and technical courses to enhance their legal and technical knowledge and allow examiner opportunities to visit companies to gain technical knowledge in their areas of expertise, which enhances their patent examination duties, and ongoing technical and legal development for examiners has been reduced.

### **E. RECOMMENDATIONS**

The PPAC recommends that the Office continue to receive stable funding to allow for the hiring of 400-600 new examiners in FY 2015. The PPAC believes that the insufficient hiring due to inadequate funding in previous years has had an impact on the Office, but that a return to stable funding will allow the Office to restore hiring goals and move the Office forward towards reducing the backlog. Additionally, the PPAC recommends continuing to target experienced IP professionals for the available new examiner positions and to advance geographical expansion of the workforce and telework initiatives to attract a larger pool of well-qualified candidates and further enhance retention of experienced examiners for an entire career.

## **V. PATENT QUALITY**

### **A. INTRODUCTION**

The issuance of high quality patents with a reasonable pendency remains the most important priority for the USPTO. Stakeholders must be able to rely on the validity of issued patents. Applicants benefit from timely decisions and from obtaining patent rights while the invention is commercially viable in the marketplace.

The USPTO made positive strides in patent quality during FY 2014. The USPTO has identified at least three facets to world class patent examination quality: (i) providing the best work products and services at every stage of the patent process; (ii) improving stakeholder experience with the USPTO based on excellent customer service; and (iii) engaging stakeholders in

partnership to educate and seek input. Below is a list of quality improvement initiatives that directly relate to each of these three facets.

## **B. WORK PRODUCTS AND SERVICES**

### **1. Quality Assurance**

The USPTO undertook efforts in 2014 to improve the measurement of patent examination quality through various initiatives. The USPTO is renewing its focus on reducing re-work by emphasizing quality early in the examination process, expanding information collected during the review of examiners' work product, and feeding review data back into the examination process at the earliest stage. For example, the USPTO is increasing the number of focused reviews conducted by the Office of Patent Quality Assurance and is measuring the impact of training in order to continue to refine and improve examiner training. The USPTO is also evaluating and refining the Patent Quality Composite measure. As part of this effort, the USPTO will hold a series of roadshows in the future to gather stakeholder input regarding refining patent quality measures to better reflect current goals and meet stakeholder needs.

### **2. Legal Training**

The USPTO has implemented a multi-phased legal refresher training program for all examiners that focuses on evaluating functional claiming and improving the clarity of the examination record. During the past year, the USPTO has completed four training modules related to functional claiming and is currently implementing the fifth training module. Over the next several months, the USPTO plans to provide examiners with additional legal refresher training on claim interpretation and written description compliance to ensure consistency in the examination of applications and to promote clear and complete written records that will lead to higher quality issued patents.

### **3. Technical Training**

The USPTO is expanding its Patent Examiner Technical Training Program (PETTP) to provide patent examiners with direct access to experts from industry and academics who can share their technical knowledge on prior art and industry standards in areas of emerging and established technologies. The expansion of the PETTP includes simplifying the process to solicit and review training offers from experts and developing a publicity campaign to enhance awareness of, and increase participation in, the PETTP.

#### **4. Crowd Sourcing Prior Art**

The USPTO is expanding ways for the public to help examiners determine whether an invention is patentable by finding relevant prior art through the use of crowd sourcing. Based on stakeholder input, the USPTO has implemented a multi-faceted approach that includes: (i) evaluating the AIA third-party prior art submission process to determine how to increase volume and improve the quality of these submissions; (ii) updating examiner guidance and training to empower examiners to more effectively use crowd sourcing to locate prior art; and (iii) employing a Presidential Innovation Fellow to research how crowd sourcing can most effectively be used to improve patent quality. The USPTO's crowd sourcing program will expand ways for the public to help examiners determine whether an invention is patentable by finding relevant prior art. This program is a worthy initiative.

#### **5. Glossary Pilot Program**

The USPTO launched a Glossary Pilot Program in June 2014 designed to enhance claim clarity in software-related patent applications by gauging the use of glossaries by applicants.

#### **6. Information Technology Systems**

The USPTO has undertaken a series of modernization initiatives to update aging infrastructure and extensively improve its information technology (IT) systems. The key component of this plan is a project called Patents End-to-End (PE2E), which is a set of IT systems aimed at streamlining the processing of patent documents and actions from their inception to their downstream archiving. PE2E will provide opportunities for enhancements to patent quality through improved search capabilities and consistency in office actions.

### **C. CUSTOMER SERVICE/EXPERIENCE**

#### **1. Interview Training**

Since 2012, the USPTO has provided examiners with annual interview practice training. In 2014, the USPTO continued this training to promote discussion between examiners and applicants to ensure that issues that arise during prosecution are resolved as effectively and efficiently as possible.

#### **2. *Pro Se / Pro Bono* Program**

The USPTO is developing a pilot program that will dedicate a team of specially trained patent examiners to examine pro se filed applications and work with pro se applicants during prosecution. In addition, the USPTO is planning to allocate additional staff dedicated to

assisting pro se applicants in preparing and filing patent applications. As explained in more detail in the Pro Bono Program and Bar Association Engagement section of this report, the USPTO also hired a pro bono coordinator to expand the Pro Bono Program, which helps pro se applicants secure an attorney to represent them before the USPTO, to all regions in the United States.

### **3. Customer Support Call Centers**

The USPTO has numerous call centers that provide patent information and services to applicants and the public, including independent inventors, small businesses, and university-affiliated inventors. The call centers assist stakeholders with questions relating to how to file a patent application, fees, prosecution-related issues, petitions, and publishing. Employees at these call centers regularly undergo customer service training to ensure stakeholders are provided the highest quality customer service. A representative from the USPTO's call centers spoke at multiple PPAC meetings in 2014.

### **4. Patents Ombudsman Program**

This program enhances the USPTO's ability to assist applicants, such as independent inventors and small businesses, or their representatives with issues that arise during patent application prosecution. More specifically, when there is a breakdown in the normal application process, including before and after prosecution, the Patents Ombudsman Program can assist to ensure the application is on the right track. The PPAC supports the use of the Patents Ombudsman Program as it enhances the USPTO's ability to assist applicants with issues that arise during patent application prosecution. The PPAC is in the process of requesting information from the USPTO with respect to how often this program is used. Stakeholders have raised concerns of retribution from examiners if applicants involve the Patent Ombudsman and complain about the quality or speed of patent prosecution.

### **5. Customer Satisfaction Surveys**

The USPTO conducts multiple surveys to measure satisfaction of applicants and practitioners with patent examination quality and to gather feedback from stakeholders on how well the USPTO is meeting the needs of the users it serves. Feedback from these surveys helps the USPTO make the necessary adjustments to continue to provide high quality service to its stakeholders.

## **D. PUBLIC OUTREACH/EDUCATION**

### **1. Stakeholder Partnerships/Outreach**

The USPTO has formed several partnerships with the stakeholder community to provide opportunities to bring stakeholders and the USPTO together to share ideas, feedback, experiences, and insight on patent related issues arising in specific technology areas. For example, during the past two years, the USPTO held well-attended Software Partnership meetings covering topics on functional claiming, glossaries, prior art, and crowd sourcing. The USPTO has also conducted outreach meetings with a number of trade associations, business groups, advocacy organizations, and other interested parties to provide an update on how the White House's Executive Actions are being implemented and to facilitate discussions related to patent reform.

### **2. Roadshows and Other Public Meetings**

The USPTO held a public forum in May 2014 to receive public feedback from organizations and individuals on the USPTO's recently issued subject matter eligibility guidance. The USPTO also conducted roundtables on the AIA trials (*see* [http://www.uspto.gov/ip/boards/bpai/ptab\\_aia\\_trial\\_roundtables\\_2014.jsp](http://www.uspto.gov/ip/boards/bpai/ptab_aia_trial_roundtables_2014.jsp)) and roadshows on AIA FITF (*see* [http://www.uspto.gov/aia\\_implementation/roadshow.jsp](http://www.uspto.gov/aia_implementation/roadshow.jsp)). As noted above, the USPTO plans to hold multiple roadshows over the coming months to collect stakeholder input on refining patent quality measures to better reflect current goals and meet stakeholder needs.

## **E. RECOMMENDATIONS**

The PPAC commends the Office for adopting the three-facet approach and other programs aimed at advancing world class patent examination quality. However, the PPAC continues to remain concerned with the quality of examination as some stakeholders do not believe that examiners conduct a complete, initial search based on the scope of the claims in the initial patent applications. In addition, stakeholders have expressed concern that, even if a complete search is conducted by an examiner, the examiner is not properly applying the art to the application's claims. Therefore, the PPAC recommends that the USPTO continue to provide training to examiners to have them conduct a complete initial search and to correctly apply the prior art to the claims.

The PPAC commends the additional examiner training being provided by the USPTO and recommends that the claim interpretation training section focus on, among other things, the "broadest reasonable interpretation standard" for interpreting claims.

The PPAC requests that the USPTO continue to review the examination process to consider ways to avoid a patent application from going to “final” status prematurely. For example, examiners should issue a second non-final office action if the prior art references cited in the second office action were not previously cited in the first office action if only minor changes were made in an amendment in response to the first non-final office action. In addition, the USPTO should consider ways to improve the quality of final rejections and ways to increase the consideration of after-final amendments. The USPTO should consider further changes to the AFCP 2.0 as it appears that a significant number of examiners are not considering the after-final amendment and are simply issuing an advisory action as a matter of course.

With respect to the USPTO’s Glossary Pilot Program, the program is relatively new, so the PPAC has not been able to determine its effectiveness. However, the PPAC recommends that the USPTO continue to improve claim clarity through additional training and proper application of the patent laws including Section 112.

The USPTO has been reviewing its patent quality composite index. The PPAC recommends that the USPTO use the actual numbers, rather than a percentage of the established target, in determining patent quality during the different stages of the examination process. The PPAC recommends against the continued reliance on the quality composite index as a bellwether of patent quality because the index may be misleading to the public. For example, the USPTO’s Dashboard includes eight quality-related measures, one of which is directed to a quality index report score of 91.3%, which would lead the public to believe an extremely high quality level is being maintained. The PPAC notes that, in more than 35% of applications that have been finally rejected and undergo review in the pre-appeal or appeal conference, the applications are either allowed or reopened for further prosecution. This means that the USPTO determined that, in more than 35% of applications going to pre-appeal and/or appeal conference, the quality of examination by the initial examiner was insufficient. This insufficiency is not reflected in the 91.3% quality index score provided by the USPTO on the Dashboard. Said another way, it is difficult to reconcile such a high quality index with the significant number of final rejections that are overturned leading into the appeal process.

## **VI. PATENT PENDENCY**

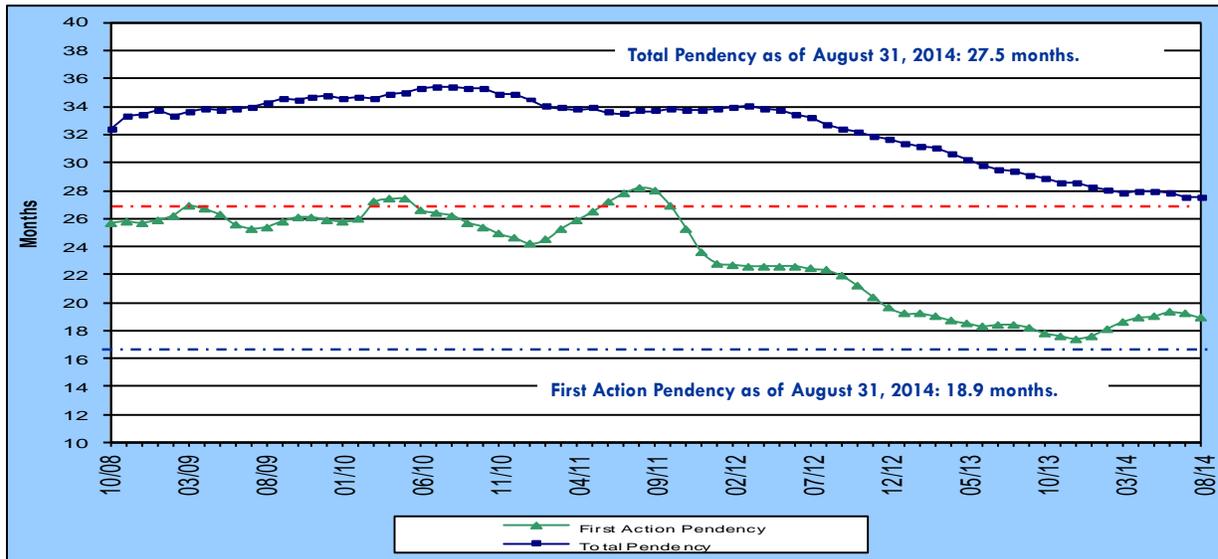
### **A. INTRODUCTION**

Patent pendency continues to be a topic of great interest to both the PPAC and the user community. During FY 2014, Average First Action Pendency decreased to 18.9 months and Average Total Pendency decreased to 27.5 months. The chart below shows the history of both these measures through August 31, 2014.



## First Action Pendency and Total Pendency FY 2009 – FY 2014 (through August)

U.S. Department of Commerce



--- Average Total Pendency FY 2014 Target (2015 President's Budget): 26.7 months

- - - Average First Action Pendency FY 2014 Target (2015 President's Budget): 17.4 months

CPC training/transition time and the change to the RCE count scheme will effect the decrease in First Action pendency in FY 2014

2

Both pendency measures have showed a sustained, significant decrease since FY 2010 with a recent bump up in First Action Pendency, likely resulting from a change to the RCE count scheme and time taken for additional training, such as training for the implementation of CPC, for the examining corps. The USPTO is to be commended for the decrease seen in pendency during the last three years.

### B. DETERMINING OPTIMAL PENDENCY

The USPTO is currently in the early stages of conducting a biennial review of fees charged for services provided to the public. An important driver of the level of those fees will be the targets established for both Average First Action Pendency and Average Total Pendency in that those measures can drive staffing levels and other agency resource requirements. Increasing or decreasing pendency targets, whether they are close to being met or not, will for at least some period of time drive staff levels, assuming that there are no funding disruptions to USPTO operations. Further, pendency levels are of significant importance to those who pursue patents because the time spent obtaining patents can have a significant impact on the success and

continued operation of small and growing businesses for which quality IP assets are critical to continued market funding.

Complicating the process of determining optimal patent pendency is the fact that patent seekers will have a broad spectrum of desires when it comes to how long each of them wants to wait to obtain a patent. In some technologies and markets, business desire to have a patent grant as quickly as possible. In others there is not as much pressure in this regard and, in fact, some business may be happy to have some amount of delay in the process of having a patent granted. The PPAC recognizes that balancing the interests of such a wide range of customer goals is challenging.

It is worth noting here that the term “patent pendency” in the mind of stakeholders means the total amount of time measured from the day a patent application is filed to the day a patent is granted. The pendency data provided to the public by the USPTO is a quite different measure. The Average Total Pendency measures the time to the initial final disposition of an application, which could be a final rejection or abandonment, and very often is not a granted patent. For example, the Traditional Total Pendency statistics do not include the pendency of RCEs. While the PPAC commends the USPTO on its efforts to make the pendency statistics and the link between pendency and staffing much more transparent to the PPAC during the past fiscal year, there is an ongoing need to align the pendency statistics published by the USPTO with the user community’s understanding of what these pendency statistics actually mean.

The current pendency goals of 10 months average first action pendency and 20 months average total pendency were established in the USPTO’s 2010-2015 Strategic Plan. These goals have served the public well in that we have seen significant reductions of both kinds of pendency. As part of the USPTO’s new 2014-2018 Strategic Plan, the USPTO is seeking stakeholder input on the definition of optimal patent pendency targets through a *Request for Comments on Optimum First Action and Total Patent Pendency* published in the Federal Register on July 9, 2014 (“the Request for Comments”). The deadline for submitting written comments addressing this issue was September 8, 2014. The PPAC commends the USPTO for seeking this input from stakeholders regarding an issue that is of great interest to everyone that pursues patents.

The PPAC had endorsed the goals of 10 months First Action Pendency and 20 months Average Total Pendency. However, averages translate to differing results from one technology area to another with some higher and some lower than the target, depending on the staffing and application levels. This means that many applications will not achieve the stated pendencies even though the USPTO on average will meet the targets, leading to uncertainty and frustration from some applicants. Consequently, the PPAC believes different targets may be more appropriate than the arbitrary 10 and 20 months current goals.

The PPAC believes a focus on the targets established by Congress in the American Inventors Protection Act (AIPA) has a number of benefits, including a reduction in the amount of PTA granted in patents. The PTA provisions of the AIPA set up examination timeframes referred to as “14-4-4-36,” as explained in more detail in the Request for Comments. Because transparency and increased certainty assist agencies and the public, focusing on reducing PTA is a good approach and also good public policy. These congressionally-mandated timeframes target most timeframes of prosecution and would help drive the examination of most applications. Prioritizing the examination of applications based on the amount of PTA that would accrue would ensure handling of all applications without allowing the targeting of any area or type of application while other applications are allowed to develop significant backlogs as occurred with the RCEs. These AIPA targets also would provide greater certainty to applicants and the public for actual expectations on examination timeframes. Granting PTA should be the exception, not a routine event. An overall focus on reducing the amount of PTA is suggested.

The PPAC looks forward to reviewing with the USPTO the comments received in response to the Federal Register notice and supports efforts to reduce patent pendency where it makes sense and does not have a deleterious effect on patent quality. The PPAC also would like to provide its input for some of the questions contained in the Request for Comments. First, the Request for Comments asked if First Action Pendency or Total Pendency targets should be met by nearly all applications rather than the current approach, which measures average pendency. For example, a pendency goal could be established that would be met by 90% or 95% of all applications. The PPAC generally supports this as a potential approach because meeting such a goal may likely result in an average pendency that is improved over that observed today. It is believed that combining percentages, such as 90% or 95% of applications, with the AIPA PTA timeframes would be improved goals. In addition to ensuring that X% of applications will receive a first action within 14 months, these targets should include an upper limit for achievement of the targets. For example, there should also be a target, such as, no more than 5% of the applications will receive a first action later than 18 or 22 months. Similar targets should be set for Traditional Total Pendency of three years including X% of applications completed within three years and an upper limit of no more than X % being completed within four years. These targets should be adjusted after two years to improved performance.

Addressing another question posed by the Request for Comments, the PPAC believes that a single pendency target is desirable for all Technology Centers. It is natural that some TCs will tend to have different average pendency than others for any number of understandable reasons; however, that difference is better addressed by targeted resource allocation or other pendency steps to address particular TCs. The PPAC does not believe that stakeholders who operate in technology areas where patent prosecution is perhaps inherently more complicated than others

should have to live with a different, less desirable pendency goal. A difference in pendency between TCs that is not significant is likely an acceptable state of affairs.

However, a fruitful step towards both reducing PTA and pendency would be to reduce the backlog of RCE applications whose waiting time has been a significant contributor to granted PTA. Even though RCEs are amended applications, they do not appear on the examiner's amended dockets and currently do not have a set time goal for examination. PTA begins to accrue four months after the request for an RCE. The USPTO should return RCEs to the amended docket or at the very least establish a goal for examining RCEs. This goal could align with the PTA goal of completing amended applications within four months. This would better serve applicants in continuing the discussion with the examiner in a more timely fashion and assist the USPTO in maintaining a more manageable backlog of RCEs.

There is also a potential concern arising from a reduction in first action pendency to 10 months relating to increasing uncertainty in the patenting process. This concern includes the potential for the existence of "hidden" prior art if office actions are issued before patent applications are published. The PPAC believes that this concern is valid one and that this issue should be taken into account in the setting of any new first action pendency goal.

### **C. PENDENCY INITIATIVES**

The USPTO has launched multiple initiatives to address the growing backlog of RCE applications, which efforts should all help improve patent pendency, including the following:

- After Final Consideration Pilot
- Track One (Prioritized Examination)
- Patent Prosecution Highway

The PPAC commends the USPTO for supporting these initiatives and reiterates its recommendations concerning them as outlined in the FY 2013 PPAC annual report as well as the comments/recommendations contained in the RCE section of this report. The PPAC urges the USPTO to continue to investigate new avenues for promoting these programs to the stakeholder community and looks forward to supporting this effort going forward.

### **D. RECOMMENDATIONS**

The PPAC urges the USPTO to publish pendency data that actually reflects the entirety of time required from the date of filing to the time a patent grants. Current Traditional Total Pendency does not take into account the oftentimes very long period required for action on RCEs. The

USPTO should also report the Traditional Total Pendency including RCEs in their numbers, rather than just on the Web site Dashboard.

The PPAC recommends the establishment of a goal for the completion of RCEs of four months absolute, rather than an average, to provide reduced PTA, faster service for the increased fees now charged for RCEs, and more certainty on timing of examination.

The PPAC recommends establishing pendency goals linked to the PTA timeframes established by Congress and focusing on reducing PTA overall. This is good public policy and provides more concrete expectations for the timing of examination of applications.

The PPAC looks forward to working with the USPTO to review the input from the Request for Comments and develop initiatives that address patent pendency. These steps will be closely tied to initiatives directed to improving patent quality and addressing the RCE backlog.

## **VII. PATENT TRIAL AND APPEAL BOARD**

### **A. INTRODUCTION**

The AIA established the Patent Trial and Appeal Board (PTAB or Board) on September 16, 2012. The Chief Judge of the PTAB is James Donald Smith. The Board's responsibilities include: reviewing adverse decisions from examiners upon applications for patents pursuant to section 134(a); reviewing reexamination appeals pursuant to section 134(b); conducting derivation proceedings pursuant to section 135; and conducting covered business method (CBM) patent reviews, *inter partes* review (IPRs), and post-grant reviews (PGRs) pursuant to section 18 of the AIA and chapters 31 and 32 of Title 35, United States Code. The Board also continues to decide patent interferences pursuant to 35 U.S.C. 135.

### **B. BOARD STAFF**

At the end of FY 2014, the Board includes 214 judges. Each of the satellite offices includes PTAB judges. More specifically, the Dallas office has 11 judges, the Silicon Valley office has 19 judges, the Denver office has nine judges, and the Detroit office has eight judges. The placement of these satellite offices around the country has expanded the ability of the Board to employ qualified individuals to meet the growing workload faced by the PTAB. The Board continues to review candidates and plans on hiring additional judges in FY 2015. The PTAB Web site includes helpful links to an administrative patent judge recruiting brochure and to allow applicants to apply on line.

## C. BOARD STATISTICS

The backlog of *ex parte* appeals pending at the Board stands at 25,658 applications as of September 30, 2014. The backlog averaged about 25,800 applications for the year. The trend was relatively flat for the year, with the peak reaching 26,208 applications in January 2014 and the lowest levels reaching 25,594 in July 2014. The Board will need to “think out of the box” when it comes to considering new ways to decrease this backlog. In addition, according to current statistics on the PTAB Web site for FY 2013, the average pendency of an *ex parte* appeal is 36 months from filing the notice of appeal to final written decision. This pendency is simply too long.

The Board continues to implement a *per curiam* process, whereby certain appeals can be decided based on arguments by the examiners or appellants in the written record. These *per curiam* decisions are shorter and generally disposed faster than other appellate decisions. In FY 2012, the PTAB issued 142 *per curiam* decisions; in FY 2013, the PTAB issued 136 *per curiam* decisions; in FY 2014, the PTAB issued 122 *per curiam* decisions. The PPAC recommends continued use of *per curiam* decisions, but emphasizes that the written record must sufficiently explain the facts and law in the case.

The Board has affirmed or affirmed-in-part 67%, reversed 30%, and remanded or dismissed about 3% of the examiner’s decisions. These statistics are consistent with the affirmance, reversal, and remand/dismissal rates of previous years. In addition, the PPAC is encouraged by the low numbers of remands and dismissals, which indicate that the Patent Examining Corps provides complete examiner’s answers to the PTAB.

## D. AIA PROGRESS

As of September 30, 2014, the Board received 2,082 total petitions since inception of the AIA: 1,841 IPR proceedings, 233 CBM proceedings, two PGR proceedings, and six derivation proceedings. The majority of the petitions were in the electrical/computer software area. In particular, the petition filings by area of technology were: 71.6% electrical/computer software; 15.6% mechanical; 6.8% chemical; 5.6% biotechnology/pharmaceutical; and 0.4% design. With respect to IPRs and CBMs, patent owners have submitted 1,057 preliminary responses and waived their rights to submit a preliminary response in 265 cases. The PPAC is pleased with the patent owner’s usage of preliminary responses and waivers as these options were not available in *ex parte* and *inter partes* reexamination proceedings. In addition, 236 petitions have been settled in FY 2014. The PPAC also finds the use of settlements encouraging as this option was not available in *ex parte* and *inters partes* reexamination proceedings. Lastly, the PTAB has issued 129 final written decisions in IPR proceedings and 13 in CBM proceedings.

The PTAB continued to be busy in FY 2014, receiving a peak of 190 IPR/CBM petitions in June 2014. A comparison of the number of PTAB petitions to district court filings involving patent litigations in 2013 highlights this point. The PTAB received 1,494 petitions from September 2013 to September 30, 2014; in all of 2013, 1511 complaints were filed in the Eastern District of Texas, 1335 in the District of Delaware, 408 in the Central District of California, and 248 in the northern District of California. The number of PTAB filings in FY 2014 was 1,494, thereby putting the PTAB ahead of all but one of the federal district courts in terms of patent disputes that they are handling.

#### **E. AIA ROUNDTABLES AND FEDERAL REGISTER NOTICE**

The PPAC commends the PTAB for its outreach efforts in 2014. In particular, the PTAB hosted eight roundtables around the country in April and May 2014 to share information about the AIA trials including statistics, lessons learned, and techniques for successful motions practice. The Board received feedback about the trials and featured a panel discussion to elicit public input. At each roundtable, administrative patent judges participated and were available for questions and conversation.

The eight locations and dates that the PTAB Roundtables were held include:

- i. Alexandria, VA, April 15, USPTO Headquarters;
- ii. New York City, NY, April 17, New York Law School;
- iii. Chicago, IL, April 22, Chicago Public Library;
- iv. Detroit, MI, April 24, Cooley Law School;
- v. Silicon Valley, CA, April 29, Santa Clara University;
- vi. Seattle, WA, May 1, University of Washington;
- vii. Dallas, TX, May 6, Dallas Bar Association; and
- viii. Denver, CO, May 8, Colorado Bar Association.

The USPTO recorded the Alexandria, VA Web cast and made it available on the PTAB Web site at <https://new.livestream.com/uspto/PTABAIA>. The PPAC found this helpful and supports the continuation of recording and making available the roundtables, Web casts, and other public meetings on the USPTO Web site.

In addition to the eight PTAB roundtables, the USPTO issued a Federal Register notice dated June 27, 2014, titled *Request for Comments on Trial Proceedings Under the America Invents Act Before the Patent Trial and Appeal Board*. The Federal Register notice included two parts, one directed to non-rule comments; and a second directed to 17 questions posed by the PTAB to elicit feedback with respect to certain AIA trial rules. Comments from the public were due on September 16, 2014. The USPTO extended this deadline to October 16, 2014.

In an effort to ensure stakeholders understood the June Federal Register notice, Ms. Gongola and Vice Chief Judge Scott Boalick reviewed the notice and 17 questions therein during a Webinar on July 29, 2014. The Webinar was very helpful.

In response to stakeholders' concerns at the PTAB roundtables, the PTAB posted an article on its Web site dated May 5, 2014, titled "How to Make Successful Claim Amendments in an AIA Trial Proceeding." This article was posted on the PTAB Web site in response to the PPAC's and stakeholders' concerns that only one claim amendment has been allowed by the PTAB in two years.

#### **F. OFFICE OF INSPECTOR GENERAL'S REPORT**

The U.S. Department of Commerce, Office of Inspector General (OIG), released a report on July 28, 2014. In the report, the OIG reported that it conducted an investigation into allegations provided by anonymous whistleblowers that PTAB paralegals were receiving pay for time not worked over a prolonged period of time. The PPAC discussed this report with Chief Judge Smith before and during the August PPAC meeting. The PPAC appreciates the changes that the Office has made in response to this report, as well as in response to a July 10, 2013, USPTO investigative report on this matter, and looks forward to further updates from the USPTO and the PTAB on progress in this area.

#### **G. RECOMMENDATIONS**

The PPAC applauds the PTAB for the work it has done since the passage of the AIA in September 2011. As evidenced by the record 190 IPR/CBM petitions filed in June 2014, the PTAB proceedings have quickly become a critical aspect of the U.S. patent system. This is especially true in light of recent statistics indicating that more than 80% of the PTAB proceedings involve patents that are involved in parallel district court litigation. The PTAB is extremely busy, not only with new petitions being filed but also with pending cases that need active involvement from the PTAB judges. The pending cases also include *ex parte* and former *inter partes* reexamination appeals.

A primary challenge facing the PTAB is hiring additional PTAB judges to handle the increased AIA trials' workflow while allowing judges to continue working on *ex parte* appeals. The USPTO has been able to handle this effectively because the USPTO has the money to hire the additional judges. As a result, although the AIA petitions have increased significantly, the PTAB has not exceeded the one-year time period from the institution of the PTAB decision to issuing the final written opinion in any AIA trials. In addition, the *ex parte* appeals backlog continued to decrease in 2014. The PPAC commends the PTAB for these achievements but recommends that the PTAB remain vigilant in hiring PTAB judges and explore other ways to handle the increased AIA workflow and to decrease the *ex parte* appeals backlog.

Stakeholders will be anxiously awaiting the PTAB's response to the feedback received during the PTAB roundtables and comments with respect to the June 2014 Federal Register notice. The PPAC looks forward to playing a constructive role in this process. The Federal Register notice listed 17 questions related to the PTAB rules. During the PTAB roundtables, the PTAB placed particular emphasis on question 14 as it is related to the one-year period for the PTAB to issue a final written decision. The PPAC notes that the AIA requires only a "good cause" showing to go beyond the one-year timeframe; the "good cause" standard is much lower than, for example, an "exceptional" standard. For this reason, the PPAC does not believe the PTAB should be reluctant to exceed the one-year threshold if there is "good cause" for doing so. Based on the concerns raised with multiple proceedings in questions 7-13 of the Federal Register notice, it appears that there are several cases currently before the PTAB involving multiple proceedings. If this is true, the complexity of such multiple proceedings may be "good cause" to expand the timeframe past the one-year period.

The PPAC also notes that question two of the Federal Register notice is related to the PTAB claim amendment practice. We commend the PTAB for providing the helpful presentations and mock teleconferences with the PTAB judges during the PTAB roundtables with respect to the PTAB claim amendment practice. In addition, the PPAC recognizes that the PTAB provided an article on its Web site from Vice Chief Judge Boalick on May 5, 2014, titled "How to Make Successful Claim Amendments in an AIA Trial Proceeding." However, even after taking into consideration these laudable efforts, the PPAC remains concerned that only one motion to amend has been granted in two years. We recommend that the USPTO be more flexible in the PTAB claims amendment practice to make such amendments more available to patent owners.

With respect to *ex parte* appeals, the PPAC is pleased that the backlog continues to decline. However, the average pendency of such appeals is three years from filing the notice of appeal. This pendency is simply too long.

The USPTO has successfully used pilot programs during the past couple of years to determine if some procedural changes are beneficial to the patent process. The PPAC recommends that the

USPTO consider implementing some pilot programs to expedite review of the pending appeals. The pilot programs may include allowing the patent owner or anonymous third party to pay a fee to expedite the review of the pending appeal and changing the pre-appeal brief and/or appeal conference program to allow applicants to participate in the review.

## **VIII. LEGISLATION**

### **A. INTRODUCTION**

Legislative activity in the latter part of the 113th Congress (2013-14) focused on consideration of proposals to address allegedly abusive patent infringement litigation practices and the mass mailing of vague settlement demand letters to main street businesses.

The House passed H.R. 3309, the “Innovation Act,” introduced by House Judiciary Committee Chairman Goodlatte, on a bipartisan vote of 325–91 on December 5, 2013. The comprehensive bill, as passed, included provisions that would:

- Heighten pleading requirements
- Require patent owner litigants to disclose the “Real Party in Interest”
- Enhance fee-shifting under 35 USC 285
- Create a Manufacturer’s Stay Provision
- Limit discovery before Markman claim construction hearings
- Direct the Judicial Conference to consider/issue rules related to discovery
- Clarify law as it relates to treatment of intellectual property in bankruptcy cases
- Extend term of patent cases pilot from 10 to 20 years
- Require various studies
- Direct the USPTO to develop educational resources for small business
- Change Post-Grant estoppel provision when appealing to the Federal Circuit
- Make technical changes and clarifications relating to “Inventor’s Oath or Declaration,” patent term adjustment and double patenting.

Senate action on a companion bill, S. 1720, the “Patent Transparency and Improvements Act,” stalled in the Senate Judiciary Committee. Chairman Leahy, the sponsor of bill, announced on May 21, 2014, that the bill would be removed from the committee’s legislative agenda. The bill had been scheduled for committee consideration on May 22, 2014. In his statement announcing the removal, Chairman Leahy cited the inability to achieve the “broad bipartisan support” necessary to get a bill through the Senate. He added that “Regrettably, competing companies on both sides of this issue refused to come to agreement on how to achieve that goal.”

The primary areas of disagreement among stakeholders focus on patent infringement litigation issues involving: heightened pleading requirements; limits on discovery; and a fee-shifting loser

pays attorney's fees system. Many high tech firms and other businesses pushed for strong reforms along these lines, arguing it would reduce abusive patent litigation practices, while other high-tech companies (including smaller firms and start-ups and others), drug companies, universities and others objected to some of the proposed reforms, concerned that they went too far, and would serve to devalue patents and make it harder for patent owners to enforce and/or license their patent rights.

Chairman Leahy indicated in his statement that there would be a path for passage of the bill in 2014 "if stakeholders are able to reach a more targeted agreement that focuses on the problem of patent trolls." Given Sen. Leahy's action and the tight congressional schedule for the rest of the year, it is unlikely that a comprehensive legislation moves forward in this Congress.

However, it is possible that narrowly crafted legislation addressing abusive "demand letters" may move forward. A draft bill, captioned "Targeting Rogue and Opaque Letters (TROL) Act," was approved by a House Energy and Commerce subcommittee on July 10, 2014. Similar provisions are contained in S.2049, the "Transparency in the Assertion of Patents Act," which is currently stalled in the Senate Commerce Committee.

There has been significant activity at the state level on the abusive demand letter issue. More than a dozen states have adopted legislation to regulate bad-faith patent demand letters and comparable legislation is pending in another dozen states. State Attorneys General have already commenced enforcement actions pursuant to the new laws.

## **B. WHITE HOUSE EXECUTIVE ACTIONS**

The White House announced in June 2013 a number of targeted executive actions and legislative priorities arguably to improve the patent system and protect innovators from frivolous litigation and threats of litigation. The executive actions included steps intended to ensure transparency as to patent ownership, tightening patent examiner review standards, helping small entities cope with settlement demands and litigation threats, and expanding educational outreach.

In February 2014, the White House reported on the progress made on the initial executive actions and announced three additional executive actions. The new actions, being implemented by the USPTO, involve exploring a series of measures to make it easier for the public to provide information about relevant prior art in patent applications, including refinements to the third-party submission program and effective use of crowd-sourced prior art; more robust technical training for examiners by technologists and engineers from industry and academia; and expansion of patent pro bono and pro se assistance programs to those innovators who lack the resources necessary to file and prosecute their patent applications.

The PPAC has responded to proposed actions by the USPTO regarding these executive actions and provided its guidance about them. The PPAC has expressed concerns that any changes to the obligations of applicants be balanced and reasonable, and not impose difficult burdens that do not result in real improvements in either transparency of ownership or quality of eventually issued patents.

### C. CONGRESSIONAL HEARING

On July 30, 2014, USPTO Deputy Director Michelle K. Lee testified before the House Judiciary Subcommittee on Courts, Intellectual Property and the Internet at a hearing titled “U.S. Patent and Trademark Office: The America Invents Act and Beyond, Domestic and International Policy Goals.” Deputy Director Lee provided a written statement that addressed a wide range of the USPTO’s programs, initiatives and other efforts to serve America’s innovators.

### D. PENDING LEGISLATION

- **H.R. 3309**, “Innovation Act” (Rep. Goodlatte, R-VA-6) – comprehensive bill passed by House on 325-91 vote on 12/5/13.
- **H.R. 3349**, “Innovation Protection Act” (Rep. Conyers, D-MI-13) – introduced 10/28/2013 – Provides the USPTO with full access to all fee collections.
- **S. 1612**, “Patent Litigation Integrity Act” (Sen. Hatch, R-UT) – introduced: 10/30/2013 – Requires fee shifting and bonding for plaintiffs in certain circumstances.
- **S. 1720**, “Patent Transparency and Improvements Act of 2013” (Sen. Leahy, D-VT) – introduced 11/18/2013 – comprehensive companion bill to H.R. 3309 as passed by House.
- **S. 2049**, “Transparency in Assertion of Patents Act” (Sen. McCaskill, D-MO) – introduced 2/26/2014 – Addresses abusive patent “demand” letters.
- **H.R. \_\_\_**, “Targeting Rogue and Opaque Letters (TROL) Act” - Draft Bill (Rep. Terry, R-NE-2) - draft bill adopted at subcommittee on June 10, 2014 – Addresses abusive patent “demand” letters.
- **H.R. 4763**, “Trade Protection Not Troll Protection Act” (Reps. Cardenas, D-CA-29 & Farenthold, R-TX-27) – introduced 5/29/2014 – ITC Reforms; narrowing “domestic industry” requirement.

### E. RECOMMENDATIONS

The PPAC will continue to monitor and consult with the USPTO as the legislative and administrative processes address patent quality issues and potentially abusive patent assertion activities. The PPAC recommends that the USPTO continue to engage decision makers to make sure that any proposed administrative changes are appropriately crafted and narrowly targeted

without unduly harming our overall patent system, the smooth operation of the examination process, the quality of patents issued, or the overall costs and burdens to applicants. Further, the USPTO should work within the Administration and with Congress to ensure that it has access to all future fee collections regardless of any government-wide sequestration or other limitation.

## **IX. INTERNATIONAL COOPERATION AND WORK SHARING**

### **A. THE CREATION OF THE OFFICE OF INTERNATIONAL PATENT COOPERATION**

In April 2014, the USPTO announced the creation of the Office of International Patent Cooperation (OIPC). The establishment of the OIPC reflects the USPTO's strong commitment, in concert with the stakeholder community, to make current and future improvements to the complex and costly international patent filing system.

While there have been great successes in the USPTO's international cooperative activities over many years, including, for example, the implementation of the Patent Prosecution Highway system on a global scale, new demands (legal, procedural, and technical harmonization and reform) required this consolidation of efforts into a single organization within the USPTO. The formation of the new unit will allow for consolidated and dedicated resources from within the USPTO for addressing international initiatives. In turn, we look to the OIPC to create a cohesive and strategic approach with regard to such initiatives while at the same time seeking feedback and input from the stakeholder community.

### **B. SUBSTANTIVE PATENT LAW HARMONIZATION**

Progress continues in the study of substantive patent law harmonization topics by the Tegernsee Group ("the Group"). Formed in July 2011 during a meeting held in Tegernsee, Germany, the Group is comprised of leaders and representatives from the patent offices of Denmark, France, Germany, Japan, the United Kingdom, and the United States, as well as from the European Patent Office (EPO). The Group agreed to undertake a fact finding study of four topics: 1) grace period; 2) 18 month publication; 3) the prior art effect of secret prior art; and 4) prior user rights, so as to identify areas of difference and convergence between the various patent offices. In June 2014, the Group published the "Consolidated Report on the Tegernsee User Consultation on Substantive Patent Law Harmonization" ("June 2014 Report"), which merged the results of the European surveys (i.e., Denmark, France, Germany, the United Kingdom, and the EPO) and summarized and analyzed the results of the user consultations in the United States, Japan and Europe on the topics set forth above. The adoption of the June 2014 Report marks the end of an intensive work cycle of fact-finding and user consultations with the Group currently on hiatus pending further developments.

In order to take advantage of the momentum created by the Group and its fact finding, the USPTO will host a roundtable on the topic of “International Harmonization of Substantive Patent Law” in late 2014. Past studies and experiences indicate that the most relevant aspects of substantive patent law for work sharing purposes are those related to patent searching and the application of prior art during the examination process. Accordingly during the planned roundtable, the USPTO will be seeking views from the user/stakeholder community regarding the following patent examination-related issues: (i) definition and scope of prior art; (ii) grace period; and (iii) standards for the assessment of novelty and methodology for applying non-obviousness/inventive step.

## **C. TECHNICAL AND PROCEDURAL HARMONIZATION: WORK SHARING AND OTHER INTERNATIONAL COOPERATION PROGRAMS**

### **1. IP5 Evolution**

Recognizing the continuing evolution and growth of initiatives, a forum of the five largest patent offices (i.e., EPO, JPO, KIPO, SIPO, and USPTO (known collectively as IP5)) agreed to a program management model proposed by the USPTO. The model formalizes basic project management principles across the program which, until the adoption of this agreement, was inconsistently applied. A key element of the model requires stakeholder benefits to be clearly defined for each of the projects and calls for periodic assessment to ensure those benefits are being achieved. The assessment will be done by the Program Managers who represent the executive leadership of the IP5 offices. This seemingly simple change will ensure that resources dedicated to the program are commensurate with the value they deliver.

In June 2014 in Busan, Republic of Korea, the Deputy Heads of the IP5 offices met to discuss continued IP5 co-operation with a focus on the following initiatives:

- The IP5 Patent Harmonization Experts Panel agreed to the following three issues for study: (i) unity of invention; (ii) information disclosure requirements; and (iii) written description matters.
- A new IP5 Quality Working Group was formed with its scope and mandate of work being determined during the fall of 2014.
- The IP5 offices are working to unify their positions on improvements to the Patent Cooperation Treaty (PCT) system.

Another significant topic that was addressed by the representatives was the ongoing planning and development of the Global Dossier initiative, which is discussed in further detail below.

## 2. Global Dossier Initiative

The Global Dossier initiative is a set of business services that will give users/stakeholders secure, online, one-stop access to and management of dossier information of all applications that comprise a “family” and that have been filed in multiple patent offices by establishing a common user interface to each patent office’s electronic dossier system. However, the Global Dossier is not a single IT application or system. Rather, it can be viewed as a collection of services designed to meet the business needs of multiple users/stakeholders of the patent systems of the IP5 offices. Examples of such services being developed include:

### a. Access to IP5 Offices’ Dossier Information – One Portal Dossier

The IP5 offices achieved the initial milestone of providing IP5 offices’ examiners access to the dossier information of all offices, with the next steps to be completed in the near future. The IP5 offices are currently accessing the USPTO’s file wrapper information, and USPTO examiners will have access to the dossiers of other offices with the limited deployment of PE2E to a small number of examiners scheduled for the fall of 2014. Full deployment to all examiners is currently scheduled for summer 2015.

The current schedule for public access to this information is shown in the table below:

Classification	EPO	USPTO	JPO	SIPO	KIPO
Providing Office	June 2014	Summer 2015	1 <sup>st</sup> half of 2015	June 2014	1 <sup>st</sup> half of 2015
Accessing Office	June 2014	Fall 2015	2016	2015	2 <sup>nd</sup> half of 2015

A “Providing Office” allows the dossier information to be made available to the other patent offices and to the public. An “Accessing Office” retrieves the dossier information from the Providing Office and allows its end-users to refer to it.

### b. Cross-filing Service

The IP5 offices are in the beginning stages of defining the next service, facilitation of cross-filing, which is a high priority for U.S. users/stakeholders. The goals of cross-filing include the simultaneous submission of patent documents into all participating Offices, the ability to file all documents electronically from a single portal, auto-population of common information, and simplification and harmonization of most administrative filing functions. All parties recognize that this is a very complex service with legal, business, and technical challenges. The IP5 offices have been working with their respective industry groups and stakeholders to develop user

requirements in advance of the next IP5 Working Group 2 (IT-related projects) and Global Dossier Taskforce meetings scheduled for January 2015 in Beijing, China.

The USPTO is also committed to expanding the number of patent offices participating in the Global Dossier. One means of expansion that the USPTO is exploring is to link One Portal Dossier with the World Intellectual Property Organization's (WIPO) Centralized Access to Search and Examination (CASE) system. The CASE system provides dossier information for a group of patent offices known as the Vancouver Group, which is comprised of the IP offices of Australia, Canada and the United Kingdom. The JPO has already initiated a pilot linkage to the CASE system and according to recent correspondence with the Vancouver Group, SIPO and the Israel Patent Office are participating in testing. The patent offices of Singapore, New Zealand, Vietnam and Mongolia have also joined the CASE system.

As the USPTO places more resources in the planning and development of the Global Dossier, more focus will be needed regarding global technology harmonization among the patent offices as well as greater input and feedback from the user/stakeholder community. While the Global Dossier Task Force created by the IP5 offices for stakeholder input regarding the Global Dossier has provided initial guidance, the USPTO's OIPC needs to expand its own efforts for broader outreach to the stakeholder community regarding this important initiative.

### **3. Common Citation Document**

The Common Citation Document (CCD) is a tool initially proposed by the Trilateral Industry, and was launched in November 2011 at the 29<sup>th</sup> Trilateral Conference. The CCD displays a consolidated listing of references that have been cited in related international patent applications. The CCD is an example of the IP5 offices' cooperative efforts. While the CCD was developed and is maintained by the EPO, the value of the tool requires the participation of multiple international patent offices, including the USPTO, engaged in the exchange of citation data.

A major goal of the CCD tool is to facilitate international work sharing by improving search and examination efficiency. The CCD is located on a publicly available Web site (<http://ccd.fiveipoffices.org/CCD-2.0.4/>) and was recently incorporated into the Examiner's Toolkit thereby allowing the USPTO examiners to perform compact and comprehensive prosecution.

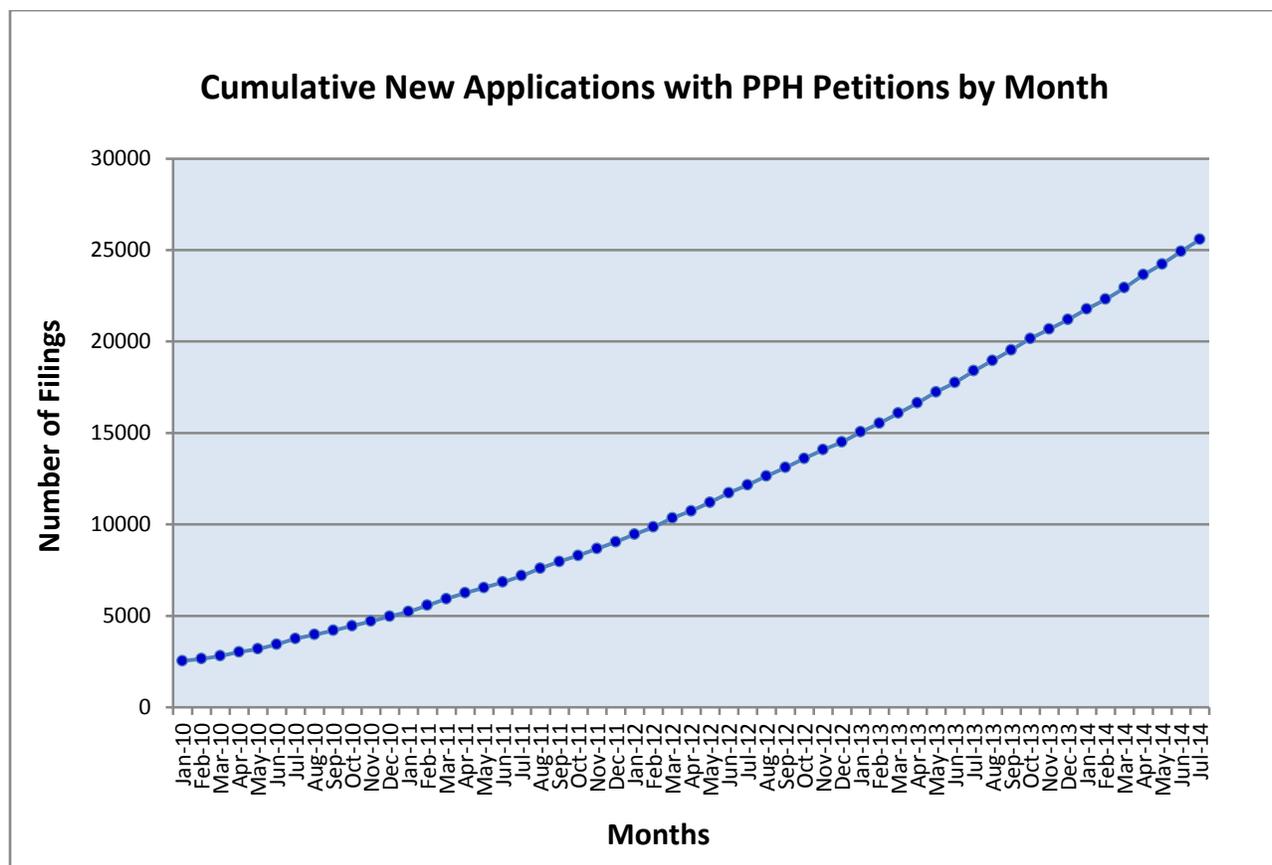
### **4. Patent Prosecution Highway**

#### **a. Overview**

Since July 2006, the USPTO has partnered with several other offices in Patent Prosecution Highway (PPH) programs. The PPH enables an applicant who receives a positive ruling on

patent claims from one participating patent office to request accelerated prosecution of corresponding claims in another participating patent office thereby allowing the applicant to obtain a patentability decision in the second patent office more quickly. Furthermore, the PPH promotes patent application processing efficiency by allowing the examiner in the patent office of the later examination process to benefit from the search and examination results from the patent office of the earlier examination process, thereby reducing workload and duplication of efforts.

A reduction in the number of office actions, lower costs, higher issuance rates and faster examination and prosecution are several of the advantages realized by users and are the factors driving the growth of the PPH. As of July, 2014, the number of PPH requests reached 25,000 and the USPTO is receiving approximately 650 requests per month, a 13% increase over the previous fiscal year. The chart below shows new PPH requests by month since January 2010 and demonstrates the program’s continuing growth and acceptance by the patent user community.



As the work sharing benefits provided by the PPH became more apparent, participation in the PPH program in its various forms has grown rapidly. However, modifications to the PPH program were not universally implemented by the different participating patent offices, and

consequently, the administration of multiple PPH programs, each having particular requirements, became increasingly cumbersome. Recognizing the need and opportunity for greater efficiency, the USPTO and several other patent offices have consolidated and replaced existing PPH programs with the goal of streamlining the PPH process for both patent offices and applicants. This has been accomplished through the launch of a new, centralized PPH framework called the “Global PPH.”

The Global PPH Pilot was successfully launched in January 2014 by 17 patent offices: JPO (Japan), KIPO (Korea), UKIPO (United Kingdom), CIPO (Canada), IP Australia, DKPTO (Denmark), NBPR (Finland), ROSPATENT (Russia), HIPO (Hungary), SPTO (Spain), PRV (Sweden), INPI (Portugal), ILPO (Israel), NPI (Nordic), NIPO (Norway), IPO (Iceland) and the USPTO.

The USPTO also participates in the IP5 offices’ PPH Pilot program (“IP5 Pilot”). The IP5 Pilot started at the same time as the Global PPH Pilot and is virtually identical in most respects. The major difference is that EPO and SIPO in the IP5 Pilot will only accept work products from the other IP5 offices as a basis to enter the IP5 Pilot. From the USPTO’s point of view, PPH requests in the Global PPH Pilot and the IP5 Pilot are handled in the same way.

The USPTO also has bilateral PPH agreements with nine other patent offices including APO (Austria), SIC (Columbia), IPOCZ (Czech Republic), DPMA (Germany), IMPI (Mexico), NRIP (Nicaragua), IPOPH (Philippines), IPOS (Singapore) and TIPO (Taiwan).

#### **b. Patent Cooperation Treaty – Work Sharing**

Since its inception in FY 2011, PCT-PPH has become a contributing force to the increased growth of the overall PPH program. For over one year, the majority of new PPH requests at the USPTO have been filed via the PCT-PPH work sharing route. The USPTO continues on its expansion strategy and in January 2014 most of the USPTO’s PCT-PPH agreements were superseded by the Global and IP5 PPH programs.

The USPTO has recently concluded the second phase of a Collaborative Search and Examination Pilot Program (“CSE Pilot Program”) with KIPO and EPO. In the CSE Pilot Program, examiners from the three patent offices worked together to create a single, high quality PCT search report and written opinion. The CSE Pilot Program was also used to test the feasibility of establishing such a system on a permanent basis.

It was the opinion of the participating USPTO examiners that the quality of the final International Search Reports and the Written Opinions of the International Searching Authority in 67% of the patent applications reviewed was greatly improved by making the final work

product more complete and by providing confidence in the work product by the first examiner. Feedback directly received from these examiners in administering the CSE Pilot Program supports the conclusion that collaboration across patent offices helps to increase the confidence in the final work product across the offices. The IP5 offices are currently developing the framework for a third phase of the CSE Pilot Program.

## **5. Outsourcing PCT Searches**

Over the last several years, outsourcing of PCT searches to third party vendors has enabled the USPTO to become a world leader in overall PCT timeliness. The USPTO is attempting to maintain the progress made over the last several years, notwithstanding funding cuts dictated by the overall budget situation during FY 2013. Particularly, these budgetary cuts have impacted the USPTO's ability to fully outsource all of their incoming international applications to these third party vendors during the second half of FY 2013. These cuts in outsourcing resulted in a substantial backlog of international PCT applications waiting to be searched. While full funding was restored to the international PCT outsourcing initiative at the beginning of FY 2014, the USPTO's Chapter I timeliness for the searching of international PCT applications filed with the USPTO continues to be affected while the backlog is being worked through by the third party vendors. Additionally, the USPTO has seen an increase in the number of ISA/US Chapter I filings as a result of the small and micro-entity search fee change that went into effect in January 2014. This increase has put an additional strain on the backlog of international PCT applications, which is expected to be eliminated by the end of CY 2014.

## **6. PCT – Systemic Improvement**

The USPTO, in conjunction with the United Kingdom IP Office, has continued to pursue implementation of the "PCT 20/20" plan to improve the PCT process. To date, two of the PCT 20/20 proposals have been adopted: (i) mandatory top-up searches in Chapter II; and (ii) public availability of the written opinion of the Searching Authority at the time of international PCT application publication.

The IP5 offices recently agreed to strengthen communication and coordination in development of the PCT. The Offices agreed to prioritize four areas of work: (i) work sharing between International Authorities and national Offices; (ii) standards to improve accessibility to international PCT documents and facilitate their utilization; (iii) collaboration to enhance the quality of international searches and preliminary examinations under the PCT; and (iv) utilization of the PCT by small and medium enterprises and individual users.

As part of the IP5 offices' coordination on PCT improvements, the USPTO agreed to consolidate all the recent PCT improvement plans (e.g., the WIPO's PCT Roadmap, KIPO's PCT 3.0, etc.)

and review the implementation status of components of those plans at the next IP5 Working Group 3 meeting in Beijing, China in October 2014.

## **7. Cooperative Patent Classification**

Cooperative Patent Classification (CPC) is a classification system that the USPTO and the EPO developed collaboratively and which they manage jointly. Before the development of CPC, the USPTO and EPO each had their own classification systems, USPC and ECLA, respectively. CPC incorporates various elements of each of those classification systems and its structure is similar to that of another system, the International Patent Classification (IPC), which is administered by the WIPO. CPC has a greater number of subdivisions than IPC and is more efficient for patent searching.

The USPTO is currently transitioning from the USPC system to CPC. This shift, which began in November 2013, is expected to be completed by the end of 2014. Implementation of CPC at the USPTO requires extensive patent examiner training (approximately 1.1 million hours total, with about 868,000 hours already completed). The training is designed to help patent examiners to conduct effective searches using CPC and to categorize applications and granted patents accurately.

While costly, the transition to CPC is an investment in the future of intellectual property. The implementation of CPC will result in many benefits for both patent applicants and the IP community in general, including: enhanced examination efficiency and quality; improved access to more documents from patent offices around the world; improved navigation and understanding; facilitated work sharing on patent applications filed in multiple patent offices; improved consistency of classified search results across patent offices; and adaptive and actively maintained classification schemes.

## **8. Global Patent Search Network**

As a result of a cooperative effort between the USPTO and SIPO, Chinese patent documentation is now available for search and retrieval from the USPTO Web site via the Global Patent Search Network (GPSN) database located at <http://gpsn.uspto.gov>. Launched in June 2013, this searching tool enables examiners and the public to search Chinese patent documents in English or Chinese languages. The data available includes full-text native language Chinese patent documents and their corresponding English machine translations. Also available are full document images of Chinese patent documents. Users can search documents, including published applications, granted patents, and utility models from 1985 to 2012 in the GPSN. There are plans to add additional international patent collections in the future.

## 9. Overall USPTO PCT Statistics

**Table 3** below shows the data for PCT procedures through July 2014.

	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014 (thru July)
RO/US Receipt to record copy mailing	13 days	10 days	10.67 days	13 days	22 days
DO/EO/US Receipt to release	251 days	159 days	95 days	85 days	107 days
ISA/US Mailing of ISR/WO within 16 months from priority	82%	81%	55%	76%	44%
Mailing of ISR/WO within 18 months of priority	91%	92%	88%	92%	85%
IPEA/US Mailing of IPER within 28 months from priority	14%	21%	29%	59%	72%
Mailing of IPER within 30 months of priority	19.5%	27%	36%	67%	79%

Based on the anticipated effects of sequestration on the USPTO, the ISR mailing times for FY 2014 showed a decline from the previous year based on the reduction in funding to this third party contracted work. Although the USPTO anticipated the impact to timeliness would follow a pattern similar to that of the reduction in FY 2011, there was clearly a greater impact on timeliness due to sequestration. It is anticipated that the timeliness of ISR mailings will continue to be impacted through FY 2014 and into FY 2015 while the USPTO completes the hiring of third party contractors so as to return to previous work outputs.

## 10. Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs

The United States is currently working through the final steps for accession to the Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs (“the Agreement”). The USPTO has drafted final rules associated with expected accession to the Agreement taking into account public comments received in response to the Notice of Proposed Rulemaking published in the Federal Register in November 2013. The last remaining steps for the United States to become a member of the Hague Union are for the United States to deposit its

instrument of ratification with the WIPO in Geneva, Switzerland and for the USPTO to publish Final Rules associated with the Agreement. The Agreement will have effect in the United States after the requisite delay period from deposit of the instrument of ratification as set forth in the Agreement (e.g., three months or a longer time as set forth in the U.S. instrument of ratification). Title I of the Patent Law Treaties Implementation Act of 2012 (the Hague related changes to Title 35 of the United States Code) and the USPTO rules (once published) are all expected to be timed to take effect on the same date on which the Agreement takes effect in the United States which is projected in FY 2015.

#### **D. RECOMMENDATIONS**

Over the past year, the PPAC has seen a dramatic increase of activity with regard to international initiatives and programs based on the creation of the OIPC and the return to full funding of the USPTO. The PPAC supports the creation of the OIPC and its efforts in focusing the USPTO's initiatives globally. The PPAC also believes that the creation of the OIPC will provide a more unified message of the USPTO's initiatives to other patent offices and the user community. Additionally, having the OIPC in place should somewhat lessen the impact of future budget cuts on the USPTO since there is now a coordinated group of USPTO representatives dedicated to addressing the USPTO's global initiatives.

The PPAC supports the efforts made by the USPTO in its international cooperation and work sharing initiatives among multiple patent offices and encourages the continued development and expansion of these efforts. While the PPH program is an excellent example of the USPTO's efforts to share initiatives and resources among many patent offices, the USPTO needs to direct much more education, outreach and resources to the user community to showcase the benefits of the program, which should in turn increase usage of the PPH program. Such education and outreach would also benefit future global patent initiatives, such as the Global Dossier initiative. Further, more effort should be focused on outreach and training for the user community regarding any new software search tools and databases, such as the CCD and GPSN, as well as upcoming rule changes, such as the implementation of the Hague Agreement.

Additionally, the PPAC encourages much greater outreach to a varied audience of entities and groups from the user community for insight and input regarding current and future USPTO global initiatives. Finally, the PPAC recommends that the USPTO diligently review its efforts on an annual basis to ensure that the initiatives promote the overall objectives of harmonization and international work sharing and reduce duplication of efforts by patent offices as well as internally within the USPTO, while at the same time promote best practices to improve timeliness and quality.

The PPAC again commends the USPTO with regard to its international initiatives and programs during the past year and continues to offer its encouragement, support, guidance and assistance for FY 2015.

## **X. USPTO OUTREACH INITIATIVES**

### **A. INTRODUCTION**

In addition to the outreach activities conducted by the other offices of the USPTO (highlighted earlier in this report related to issues such as AIA implementation), RCEs, and substantive examination, the Office of Innovation Development (OID) oversees the USPTO's efforts to support American innovation, entrepreneurship, and job creation. Often working closely with other U.S. Government officials and agencies, the OID designs and implements outreach assistance programs to a wide range of stakeholders including independent inventors, women, pro se applicants, small business concerns, university affiliates, minorities, and other underserved communities.

The OID also assists the Office's educational outreach programs that promote IP protection and the valuable role it plays as a key driver of the American economy. These programs are designed to educate the public about intellectual property in general as well as the specifics of the patent application process, including the intricacies of patent prosecution and post-grant patent issues. The post patent grant education includes the importance of patents, and other forms of intellectual property, in starting, building, and growing a business.

The OID employs a variety of tools and techniques to quantify the reach of its programming and direct assistance with stakeholders. Some examples of these techniques and tools are maintaining logs of stakeholder's direct calls and emails to the OID staff, the volume of participants to in-person and Web casted programming and use of Google® analytics to measure hits to the OID Web pages and Web information provided.

### **B. INVENTORS CONFERENCES AND WOMEN'S ENTREPRENEURSHIP SYMPOSIUMS**

The OID sponsors regional and national events to educate small business concerns and independent inventors on the patent and trademark processes and on IP business strategies, recent events listed at [www.uspto.gov/inventors/events](http://www.uspto.gov/inventors/events). For these events, the USPTO provides IP expertise to the participants, including supervisory patent examiners to conduct breakout sessions and one-on-one assistance, and trademark presenters to provide education on the trademark process. Symposiums dedicated to fostering women entrepreneurs are also offered.

In FY 2014, the USPTO was able to conduct its annual Independent Inventors' Conference in Alexandria at the USPTO in August and the OID's annual Women's Entrepreneurship Symposium at the University of Denver in June. Both events were well attended by the independent inventor community and viewed as providing significant educational benefit.

### **C. USPTO REGIONAL OFFICE OUTREACH**

Saturday Seminars, serving as a direct link for inventor's questions and education, were offered quarterly at the Elijah J. McCoy Detroit satellite office and will soon be offered at the Denver satellite office. The Saturday Seminars for FY 2014 were held on Saturday, December 7, 2013, April 12, 2014, and July 19, 2014. For the December seminar, the OID staff joined by Web cast, in combination with on-the-ground Detroit staff, to offer a half day of educational programming for attendees. The April and July seminars were full day events with the OID staff on the ground working in combination with Detroit USPTO personnel and invited local speakers. Planning for outreach support to the Silicon Valley and Dallas satellite offices is underway and currently occurring on an ad hoc as needed basis.

The OID has also, in combination with the Innovation and Outreach Coordinator for the New York Region, hosted a Saturday Seminar and school education program in Brooklyn, New York. This two day event in May 2014 (Friday for students, Saturday for inventors, innovators, entrepreneurs, and makers) offered attendees basic IP information, hands-on learning, and local resources. Similar collaborative programming was conducted at Columbia University in September 2014.

### **D. SUPPORTING INVENTOR ORGANIZATIONS**

The USPTO also participates in outreach initiatives with inventor organizations throughout the United States. These are typically non-profit inventor organizations that assist inventors and innovators with the patent process. Many of these may eventually go on to start a business based on their inventions.

In FY 2014, the OID supported inventor, entrepreneur, and maker organizations and audiences by providing speakers and resources for organizational events as appropriate. The OID staff attended the International Home and Housewares Show in Chicago, Illinois to provide direct outreach and education to show attendees, particularly independent inventors located in the "Inventor's Corner" area of the show. The show itself is attended by over 40,000 visitors and includes a student design competition. The OID representatives provided direct assistance and mentoring to those students selected as top finalists in the student design competition. The OID staff additionally participated in the White House Maker Faire and as well as the regional Maker Faire in Silver Spring, Maryland and the World's Maker Faire in New York, NY.

Additionally, the OID sent a staff member to the America Makes program review in the spring of 2014. America Makes is focused on helping the United States grow capabilities and strength in 3D printing, also known as additive manufacturing. The staff member presented to members on the importance of IP protection in the United States and internationally and educated attendees on the tools available to the community to help advance their patent application through the Office.

#### **E. MINORITY/UNDERSERVED COMMUNITIES**

In an effort to expand its assistance to minority and underserved communities, the Office is currently working to build and strengthen partnerships with organizations, such as the Minority Business Development Agency (MBDA) and the Economic Development Agency within the U.S. Department of Commerce, the Society of Hispanic Professional Engineers, the National Society of Black Engineers, national professional organizations, and national and local educational institutions. In FY 2014, the OID staff participated at national and local events hosted by a majority of those organizations identified above. Participation with these organizations was often conducted in conjunction with the USPTO Office of Education and Outreach or the USPTO Global Intellectual Property Academy.

Particularly noteworthy is an on-going series of Webinars conducted collaboratively by the USPTO and the MBDA. FY 2014 Webinars were conducted for three consecutive days in both April and August 2014 and more are scheduled for FY 2015. As an example, over 1,000 persons registered for the August 2014 Webinar series.

#### **F. PRO BONO PROGRAM AND BAR ASSOCIATION ENGAGEMENT**

It is noted that the Pro Bono Program, as of June 2014, was spearheaded by the USPTO's Office of the Under Secretary. To summarize, in section 32, of the Leahy-Smith America Invents Act, Congress called upon the USPTO to assist financially under-resourced inventors and small businesses by working to establish pro bono programs across the country. In a February 2014 Executive Action, President Obama tasked the USPTO with dedicating educational and financial resources to assist inventors who lack legal representation and to expand the existing pro bono programs. The USPTO appointed the first-ever Pro Bono Coordinator in July 2014, a position within the Office of the Under Secretary. The Pro Bono Team, consisting of the Coordinator, an attorney, and a program analyst, assists in expanding current programs and targeting states in which to begin new programs. In addition, the Pro Bono Team helps to ensure the functionality of all pro bono programs and will soon utilize various forms of publicity to announce new openings of programs and other vital information to inventors, volunteer attorneys, and practitioner groups.

Right now, nine patent pro bono “hubs” exist around the country, which provide patent attorney services to inventors in 20 states. The Pro Bono Team is working steadily towards ensuring coverage in all 50 states by the end of this year. An additional 15 states are due to be launched in the near future, with the Michigan program kicking off on November 18, 2014, at the Detroit Regional Office. While metrics maintained by the various regional hubs have not always been consistent, moving into the coming year, uniform reporting requirements will be implemented so that the volume and success of the various programs can be measured.

#### **G. TRAINING MATERIALS AND WEB-BASED SUPPORT**

The USPTO has several Web sites available to assist independent inventors and pro se applicants such as: [www.uspto.gov/inventors/proseprobono](http://www.uspto.gov/inventors/proseprobono), for those inventors that are either filing on their own behalf (pro se) or are seeking free or greatly reduced services from patent professionals; [www.uspto.gov/web/offices/com/iip](http://www.uspto.gov/web/offices/com/iip), which provides “plain language” information about the patent and trademark processes and resources available through the USPTO; and [www.uspto.gov/aia\\_implementation/informational\\_videos.jsp](http://www.uspto.gov/aia_implementation/informational_videos.jsp), which provides a series of videos located on the USPTO’s AIA micro-site to provide straightforward education to independent inventors and entrepreneurs explaining important changes resulting from the recently enacted America Invents Act. The Office is continuing to develop these pages to make them dynamic as rules change and to develop additional training material content. The Office also provides a dedicated email address for inventors and small businesses to submit questions at: [IndependentInventor@uspto.gov](mailto:IndependentInventor@uspto.gov) and distributes an emailed monthly newsletter, The Inventors Eye ([www.uspto.gov/inventors/independent](http://www.uspto.gov/inventors/independent)).

While the USPTO does not investigate complaints or participate in any legal proceedings against invention promoters/promotion firms, under the American Inventors Protection Act of 1999, the USPTO will provide a public forum for the publication of complaints concerning invention promoters/promotion firms. The Office has developed a brochure to provide guidance to the inventor community on things to look out for and steps to take in hiring invention assistance providers.

#### **H. IP ASSESSMENT TOOL/SMALL BUSINESS EDUCATION**

In collaboration with the National Institute of Standards and Technology / Manufacturing Extension Partnership, the Office has created a tool for use by small businesses that will allow them to self-assess their IP assets. The tool is a Web-based questionnaire that asks small business owners pertinent questions about products and/or services offered, created, or sold by their business providing a semi-custom report according to the specific responses to the questions answered. In FY 2013, the OID continued to refine the IP Assessment Tool and

develop background materials for use in combination with the tool. Additionally, the OID staff continues to strengthen ties with the Small Business Administration.

The OID continues its work with the National Science Foundation (NSF), Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) grantees in conjunction with Trademarks, and the Global Intellectual Property Academy. At the NSF grantee conferences, the OID presents basic information on patents and provides one-on-one consultation to grantees. In addition to working with the SBIR/STTR program administered by the NSF, the OID has begun a broader approach to all SBIR/STTR programs. The OID has attended and presented at the National SBIR/STTR Conference. The national conference draws in attendees from the 11 participating federal agencies. These agencies work with 15,000 firms, spend \$21 billion in research funds, and represent over 400,000 scientists and engineers.

The OID staff is also currently participating in the National Institutes of Health Centers for Accelerated Innovation (NCAI) Program which is a \$31.5 million, seven year initiative to create an integrated, systematic, and comprehensive approach to moving basic science discoveries through early stage technology development to ultimate commercialization to advance the prevention and management of cardiovascular, pulmonary, sleep and hematologic disorders. Launched in September 2013, each Center participating in the program is a multi-partnered consortium of research performing institutions and includes: Boston Biomedical Innovation Center, Cleveland Clinic Innovation Accelerator and University of California Biomedical Research Acceleration, Integration & Development Center for Accelerated Innovation. The OID staff participates in regular meetings in order 1) to share each of the NCAI program's objectives and operational plans, 2) to provide resources to the Centers, and 3) to discuss the strategic needs for national coordination and knowledge dissemination, program evaluation and NCAI sustainability.

## **I. UNIVERSITY OUTREACH/TECHNOLOGY TRANSFER**

The Office has long played a role in IP educational outreach to universities; initial efforts were directed to where the USPTO had a well-established recruiting effort with nearby universities. In conducting university outreach, lectures targeted engineering students, business and entrepreneurship students, student organizations, and the university's technology transfer office. At many universities, the USPTO also provided lectures to faculty and staff about the state of IP protection in the current environment. The USPTO and the Association of University Technology Managers also partnered to seek judges for the Patents for Humanity program. In addition, during FY 2014 the Office frequently collaborated with the National Academy of Inventors and InventNow in reaching out to university patent holders and collegiate inventors.

## **J. MUSEUM OUTREACH**

The Office frequently works with museums seeking information, assistance, education, and exhibits. In FY 2014, the USPTO began a new long term collaboration with the Smithsonian Institution, thus replacing the former agreement pertaining to the Smithsonian Arts and Industries Building. Going forward, the OID is working in conjunction with the Smithsonian in developing programs and exhibits for the National Air and Space Museum, the National Museum of American History, and the Smithsonian American Art Museum. It is anticipated that additional creative, educational, and intellectual support and collaboration will be provided and take place across other Smithsonian venues and programs on an ad hoc basis. Through this collaboration with the Smithsonian Institution, the USPTO will also participate with the Smithsonian Institution's cable channel and innovation Web site available at [www.Smithsonian.com](http://www.Smithsonian.com).

The Office continues its efforts to further expand outreach and assistance seeking opportunities to collaborate with like-minded organizations and events to share IP education and information in its efforts to support American innovation, entrepreneurship, and job creation. In FY 2014, the OID participated in the 2014 World IP Day Celebrations hosted by the American Intellectual Property Law Association.

## **K. PRO SE PILOT PROGRAM**

The USPTO is developing, for an FY 2015 implementation, a pro se pilot program. Under executive leadership in Patents and the OID staff, the pro se pilot program is designed to operate as two distinct but complimentary "shops:" the pro se assistance shop and the pro se examination shop. These shops will respectively assist pro se applicants prior to filing and during examination. The pro se assistance shop, located in the OID and staffed by the OID and designated detailee staff will assist pro se applicants in understanding the patent process, filing requirements, and patent searching. The pro se examination shop will be an art unit of examiners selected to examine pro se applications, from the current backlog of applications, for a majority of their examination time. This pilot program is scheduled to run for FY 2015 with the possibility of being extended at the end of FY 2015 for a second year.

## **L. RECOMMENDATIONS**

The PPAC commends the USPTO on its expansion of outreach efforts to reach an ever growing number of the public and stakeholder community. The PPAC recommends that the USPTO continue to grow its programs in this area to disseminate information concerning innovation and the USPTO's role and avenues for assistance and information.

**LOUIS J. FOREMAN, CHAIRMAN**



Louis Foreman is founder and Chief Executive of Enventys, an integrated product design and engineering firm. He is also CEO of Edison Nation. Louis graduated from The University of Illinois with a Bachelors of Science degree in Economics. His interest in starting businesses and developing innovative products began while a sophomore with his first company founded in his fraternity room. Over the past 20 years Louis has created nine successful start-ups and has been directly responsible for the creation of over 20 others. A prolific inventor, he is the inventor of 10 registered U.S. Patents, and his firm is responsible for the development of well over 500 more.

The recipient of numerous awards for entrepreneurial achievement, his passion for small business extends beyond his own companies. Louis is an adjunct professor of Entrepreneurship and Innovation, teaching at Queens University, Johnson & Wales University and The McColl School of Business.

Louis is a frequent lecturer and radio / TV guest on the topics of innovation, intellectual property, and small business creation, and is frequently invited by national trade associations to be a featured speaker on the topic of innovation.

In addition to being an inventor, Louis is also committed to inspiring others to be innovative. Louis is the creator of the Emmy® Award winning PBS TV show, Everyday Edisons, and serves as the Executive Producer and lead judge. The show is filming its fifth season and appears nationally on PBS. In 2007, Louis became the publisher of Inventors Digest, a 28 year old publication devoted to the topic of American Innovation. In 2009, his first book, The Independent Inventor's Handbook, was published by Workman Publishing.

Louis serves on the Board of Directors of the James Dyson Foundation, the Intellectual Property Owners Association, Ventureprise, New Dominion Bank, and the Intellectual Property Owners Educational Foundation. Most recently, Louis was appointed by Small Business Administration Administrator, Karen Mills, to serve a three year term on the National SBDC Advisory Board.

## **ESTHER M. KEPPLINGER, VICE CHAIR**



Esther Kepplinger is Wilson Sonsini Goodrich & Rosati's Chief Patent Counselor. Her responsibilities include serving as the firm's liaison to the USPTO, ensuring that all of its patent filings are conducted in the most efficient and defensible manner, and enhancing the firm's *inter partes* USPTO practice. She also serves as an expert witness on USPTO practices and procedures. Prior to joining the firm in 2005, Esther served as deputy commissioner for patent operations in the USPTO in Alexandria, Virginia, for five years. As deputy commissioner, she oversaw the nation's patent-examination process, with all the patent examiners in the United States reporting to her. Esther managed a budget of \$700 million and was responsible for the day-to-day operations of the country's seven patent technology centers, including about 4,500 people.

Esther also played a pivotal role in establishing the policies and strategic direction of the patent examining corps, helping to implement the USPTO's goals for improving quality and efficiency of service. With the USPTO since 1973, Esther has held a variety of other positions, including patent examiner and supervisor for a biotechnology art unit and group director for the chemical and materials engineering group. While at the USPTO, Esther received a number of awards, including the Presidential Rank Award in 2002 and the Department of Commerce Gold Medal in 1998, 2004, and 2013.

## **WAYNE P. SOBON**



Wayne P. Sobon, Vice President and General Counsel of Inventergy, Inc. is responsible for Inventergy's overall legal operations. Wayne was most recently Vice President and Chief IP Counsel for Rambus Inc., responsible for Rambus' global IP development program. Originally from Phoenix, Arizona, Wayne received his B.S. degree in physics and B.A. degree in German Studies from Stanford University in 1984 and his J.D. and M.B.A. from the University of California, Berkeley in 1992. Since receiving his law and business degrees, Wayne worked at several Silicon Valley law firms, most recently Gray Cary Ware & Freidenrich LLP (now DLA Piper), where he was a partner specializing in patent prosecution, litigation and general IP counseling. Wayne served as Associate General Counsel, and Director of Intellectual Property for Accenture from 2000 to 2011.

Wayne is a frequent speaker and lecturer on IP issues, is President Elect of the American Intellectual Property Law Association, a member of the USPTO's PPAC, a member of the

board of Invent Now.org of the National Inventor Hall of Fame, and a prior member of the board of the Intellectual Property Owners Association.

**VALERIE LANDRIO MCDEVITT, J.D., MST**



Valerie Landrio McDevitt is the Associate Vice President at the University of South Florida, Technology Transfer Office. USF recently ranked 12th world-wide for granted U.S. patents among all universities; and within the Top 20 for executed licenses and options in the United States, and Top 15 in the United States for number of startup companies among individually reporting universities.

Prior to joining USF, Valerie served as assistant patent counsel and a research chemist for Bausch & Lomb Pharmaceuticals. She also participated in the American Association for the Advancement of Science Fellowship program and worked as a science advisor with a House subcommittee in Washington, D.C.

Valerie received her BS in Chemistry from Siena College in Loudonville, New York, MST in Chemistry at the University of Florida, and a JD at Emory University School of Law. She is a certified licensing professional through LES, a registered technology transfer professional through ATTP, a member of the Georgia and Florida bars, and is admitted to practice before the Federal Patent and Trademark Office.

**CLINTON H. HALLMAN, JR.**



Clinton Hallman is the Chief Patent Counsel for Kraft Foods Group, Inc. He has responsibility for patent matters at Kraft and manages a staff with counsel in the Chicago area. His time at Kraft has involved a variety of experiences including major litigation matters, business divestures, and IP strategy development. Prior to working at Kraft he was a patent counsel at the Altria Group for several years where he was responsible for patent prosecution, opinion work and significant client counseling. His responsibilities there included a stint at an Altria subsidiary that was created to market technology developed for the tobacco industry in other areas such as medical devices, fuel injector technology and alloys. Clinton has had a stint in private practice at a small IP boutique where he handled patent, trademark and copyright matters working with companies in the textiles and furniture industries.

Clinton got his start in intellectual property at Mobil Oil Corporation where he worked as a project engineer and construction manager for several years before joining the office of patent counsel. His patent work at Mobil included support of the plastics division of Mobil Chemical.

Clinton served as an officer in the U.S. Navy having been commissioned in 1977. His service was all sea duty with most of that time assigned to the engineering departments of the ships on which he served.

Clinton is a 1977 graduate of the U.S. Naval Academy with a degree in Mechanical Engineering. He is a 1994 graduate of the George Mason University School of Law in the Patent Track. He is admitted to practice in Illinois (Corporate), North Carolina and Virginia. He is a member of the Intellectual Property Law Association of Chicago, the American Intellectual Property Law Association, and the American Bar Association. He sits on the board of directors of the Greater Chicago Food Depository the Intellectual Property Association of Chicago and the Loyola Academy Sailing Club.

Clinton is married and has two sons, ages 27 and 21. He lives and works in the suburbs north of Chicago, IL.

## **MARYLEE JENKINS**



Marylee Jenkins is a partner at Arent Fox LLP and head of the New York Office's Intellectual Property Group. She has extensive experience in all aspects of IP matters and counsels a diverse international client base that includes Fortune 500 companies, not-for profit organizations, and small businesses. She counsels clients on disputes and strategies, portfolio enforcement and management, e-commerce, and software development and protection on issues involving computers and the Internet. Throughout her career, Marylee has devised unique and innovative solutions to complex IP matters for clients across the globe.

On protection and enforcement matters, Marylee has routinely prosecuted domestic and foreign patent applications in the electrical, electromechanical and computer industries, including computer hardware and software, Internet and computer-related technologies, telecommunication, and information and financial systems. In addition, she provides counseling and opinion work on trademark selection, clearance, prosecution, registration, brand management and enforcement and represents clients in IP and bankruptcy litigations and in patent appeals, reexaminations and reissues and trademark oppositions and cancellations before the USPTO.

Marylee has been a member of the USPTO's PPAC since February 2013. She is a past Chairperson of the American Bar Association's Section of Intellectual Property Law and is a past President of the New York Intellectual Property Law Association. She is currently serving again as a member of the ABA Standing Committee on Technology and Information Systems and is a Fellow of the American Bar Foundation. Marylee is a member of John Marshall Law School's Intellectual Property Law Advisory Board and was a member of Columbia Engineering School's Engineering Council for several years.

Marylee holds a B.S. in mechanical engineering from Columbia University School of Engineering and Applied Science, a B.S. in physics from Centre College of Kentucky and a J.D. from New York Law School. Marylee is admitted to the bars of New York, Connecticut, the U.S. District Courts for the Southern and Eastern Districts of New York, the U. S. Court of Appeals for the Federal Circuit, the U.S. Supreme Court and is registered to practice before the USPTO.

#### **A. CHRISTAL SHEPPARD, Ph.D., J.D.**



Assistant Professor Sheppard joined the University of Nebraska faculty in 2011, after over two decades of Science and Intellectual Property Law and Policy experience. She is an Assistant Professor and co-founded a program of Concentrated Study in Intellectual Property law at the Law College.

Dr. Sheppard began her career as a scientist earning a M.S. and Ph.D. in Cellular and Molecular Biology from the University of Michigan. After receiving a J.D. from Cornell University Law School and interning with Judge Radar at the Court of Appeals for the Federal Circuit and the Executive Office of the President's Office of Science and Technology Policy, she was a practicing attorney at the law firm of Foley & Lardner earning extensive experience in patent prosecution, client patent counseling and litigation. She then served in the Office of the General Counsel of the United States International Trade Commission working on Section 337 matters, arguing before the United States Court of Appeals for the Federal Circuit. In 2005, Dr. Sheppard also completed Harvard University's John F. Kennedy School of Government's Executive Education for Senior Managers in Government program.

Her successful career in IP law and policy included her tenure as Chief Counsel on Patents and Trademarks for the United States House of Representatives Committee on the Judiciary where she was integral in many endeavors including the Leahy-Smith America Invents Act, the most comprehensive change to this nation's IP laws in over 60 years.

In April of 2012, Dr. Sheppard testified before the United States Congress House Committee on the Judiciary at the hearing “International Patent Issues: Promoting a Level Playing Field for American Industry Abroad.” She has been quoted by the Wall Street Journal, Dow Jones News Wire, Fox Business, the Chicago Sun Times and Politico.

### **PETER THURLOW**



Peter Thurlow is a patent attorney and partner at Jones Day law firm in New York. He has significant experience in all aspects of domestic and international patent prosecution, including post-grant reissue, *ex parte*, and *inter partes* reexamination proceedings. As a patent prosecution attorney, his experience includes drafting, filing, and prosecuting United States patent cooperation treaties and international patent applications. Mr. Thurlow provides litigation support for patent litigation in the District Courts, the International Trade Commission, and before the Court of Appeals for the Federal Circuit. Mr. Thurlow is the current chairperson of the Patent Law Committee for the New York Intellectual Property Law Association (NYIPLA). Mr. Thurlow has been active in the implementation of the America Invents Act, representing the NYIPLA’s views before the USPTO. Mr. Thurlow received his bachelor’s degree in marine engineering from the United States Merchant Marine Academy; his master’s in business administration from Pace University in New York; and his law degree from Brooklyn Law School. Mr. Thurlow is serving his first term as a PPAC member.

### **PAUL JACOBS**



Dr. Jacobs is the founder and president of Jake Technologies, Inc., a technology service company focused on strategic technology development, product evaluation, and advising corporate counsel and law firms on issues related to intellectual property. Prior to founding Jake Technologies, Inc., Dr. Jacobs held leadership positions as chief technology officer, Primus Technology Solutions; president and chief operating officer, and chief technology officer, AnswerLogic, Inc.; managing vice president, electronic commerce, director of product marketing, and director of media information technologies, SRA International, Inc.; president and chief executive officer, IsoQuest, Inc.; and as a computer scientist at General Electric. Dr. Jacobs received his bachelor’s and master’s degrees in applied mathematics at Harvard University; and his doctorate from the University of California, Berkeley. He currently teaches Information Architecture at the University of Maryland in College Park. Dr. Jacobs is serving his first term as a member of the PPAC.

United States Patent and Trademark Office



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